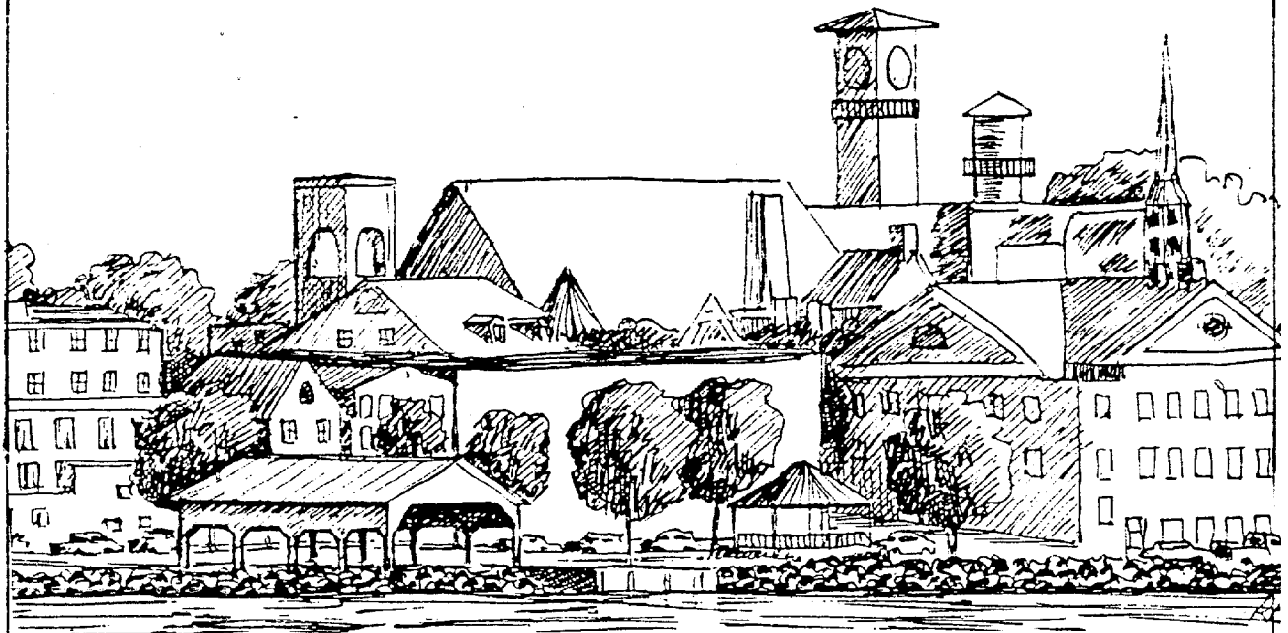


\* B · R · I · S · T · O · L \*

B O R O U G H



# COMPREHENSIVE PLAN



HT  
168  
.B75  
C66  
1986  
c.2

ugh of Bristol, Bucks County, Pa.

DRAFT

REVISED COMPREHENSIVE PLAN

BRISTOL BOROUGH

BUCKS, COUNTY, PENNSYLVANIA

---

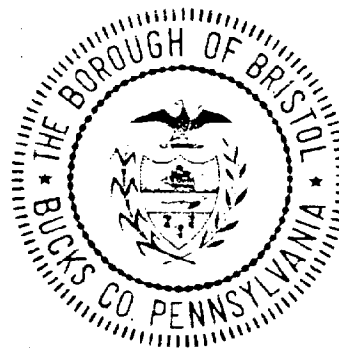
January 1986

BRISTOL BOROUGH OFFICIALS

January 1986

Borough Council

William Pezza, President  
David Clark, Vice President  
Thomas Corrigan  
Joseph Coffman  
George Pirollo  
Donald McCloskey  
James Lutz  
Charles Caucci



Mayor

Gary Tosti

Planning Commission

William Fairall, Chairman  
Harrison Fisher  
William Salerno  
Glenn Friedman  
Ralph Lalli

Borough Manager

Fidel Esposito

Borough Solicitor

Richard Snyder

Borough Engineer

S. J. Bruce Campbell

This Plan was financed jointly by the U. S. Coastal Zone Management Act, as administered by the Commonwealth of Pennsylvania, Department of Environmental Resources, the Grundy Foundation and Community Development Block Grant funds of the Borough of Bristol.

HT168.B75C66 1986 c.2

THE  
COMPREHENSIVE PLAN

FOR THE PRESERVATION AND DEVELOPMENT OF

BRISTOL BOROUGH,

PENNSYLVANIA

1986

Planning and Zoning Consultant

Urban Research and Development Corporation  
Bethlehem, Pennsylvania

## TABLE OF CONTENTS

	<u>PAGE</u>
<b>INTRODUCTION</b>	
Foreword	1
Positive Things Are Happening in Bristol	2
The Purpose of the Plan	3
The Format of this Plan	4
<b>THE FOUNDATION FOR THE PLAN</b>	
The Background Studies	5
Bristol Within the Region	6
A Brief History of Bristol	7
<b>CHOOSING OUR DIRECTION: MAJOR GOALS</b>	10
<b>THE BOROUGH-WIDE PLANS</b>	
The Overall Plan for Land Uses	12
- Natural Features and Floodplains Map	17
- 1985 Existing Land Use Map	18
The Comprehensive Plan Map	19
The Plan for Community Facilities and Services	20
- Community Facilities Map	24
The Plan for Recreation	25
The Plan for Transportation	35
- Street Functions and Traffic Volumes Map	42
- Transportation Characteristics Map	43
The Plan for Housing	45
The Plan for Economic Development	49
The Plan for Historic Preservation	59
- Major Historic Sites and Proposed Historic Districts Map	66
The Plan for Energy Conservation	67
<b>THE PLANS FOR AREAS OF BRISTOL</b>	
Map of Bristol Planning Areas	72
The Plan for the Mill Street Area	73
- Concept Map of Mill Street and the Riverfront	82
The Plan for the Riverfront/Lions Park	83
- Design for the Waterfront Park	86
The Plan for the Bristol Marsh	87
- Bristol Marsh Nature Preserve Design	88
The Plan for the Rohm and Haas Area	89
The Plan for the West Side	90
The Plan for the Old Town Area	92
The Plan for the Old Mill Area	94
The Plan for the Harriman Area	97
The Plan for the Old Shipyard Area	100
The Plan for the Keystone/Green Lane Industrial Area	102
The Plan for the Golf Ranch/Route 13 Corridor	105
- Proposed Site Plan of Bristol Commerce Park	108
The Plan for the North Side	109

## TABLE OF CONTENTS (CONT.)

	<u>PAGE</u>
PUTTING THE PLAN INTO ACTION	110
EXISTING CONDITIONS AND TRENDS: A Summary of Three of the Background Studies	
A Summary of Population Characteristics	115
A Summary of Housing Characteristics	116
A Summary of Economic Characteristics	117

INTRODUCTION

## FOREWORD

The Borough of Bristol is a community worthy of great pride. Through the efforts of our forefathers and current citizens, Bristol has become a very livable community. Bristol has a special character. Our streets and neighborhoods were designed for people. The Delaware River offers us great scenic beauty. Many buildings worthy of historic and architectural merit stand throughout the Borough. Our people have a deep ethnic and cultural heritage.

We have undertaken this Comprehensive Plan because we pride ourselves in our community, and wish to see it continue to improve. This Plan will serve as a framework to help bring together the efforts and energy of all Bristol citizens, officials and business persons and the work of numerous Federal, State and county agencies, foundations and other nonprofit organizations. This Plan will serve to bring long-term direction and vision to individual actions.

This Plan stresses the preservation and enhancement of the best features of Bristol and the improvement of all aspects of our community. Opportunities are highlighted; strategies have been designed.

We hope you will be a major part of our efforts to make Bristol the best community it can be.

*The Bristol Borough Planning Commission*



## POSITIVE THINGS ARE HAPPENING IN BRISTOL

This Plan has been developed at a time when many positive things are happening in Bristol. Not only are citizens and groups in Bristol becoming increasingly interested in working to improve Bristol, but they are developing a greater understanding of the many ways improvements can be made. Meanwhile, a whole range of agencies and organizations from outside of Bristol have become involved in very positive ways. The full potential of Bristol and its special character are becoming very widely recognized.

A few of the many positive things happening are:

- The National Park Service, working closely with a Citizens Advisory Committee, has developed a Riverfront Revitalization Strategy for Bristol. The major findings and recommendations of this work have been integrated into this Comprehensive Plan.
- Bristol's work has received valuable support on the U. S. Congressional level.
- Several agencies of the Commonwealth of Pennsylvania have provided assistance and funding, especially the Department of Environmental Resources and the Department of Community Affairs.
- The Grundy Foundation has provided the leadership and funding for numerous and varied projects to improve Bristol. These efforts include the conversion of the Leedom Carpet Mills building into apartments, the removal of the Bristol rail yard and spur track, improvements to the Borough's riverfront park and the development of a theater for the performing arts.
- The Nature Conservancy, a national organization, has received a State grant to develop the Otter Creek Marsh into a natural preserve and study center.
- The Golf Ranch tract on Route 13 is under agreement to be developed into Bristol Commerce Park, an attractive mixed commercial, office and light industrial development.
- A State grant has been approved to research Bristol's historic buildings so that additional historic districts can be created and nominated to the National Register of Historic Places.
- The old spur railroad route is to be removed, opening up a long stretch of land for nature trails, recreation, parking and development.

Many, many other significant efforts are discussed throughout this Plan. These include many smaller but important efforts, such as stores moving in and homes being rehabilitated. The challenge will be to coordinate these efforts for the highest benefits to the quality of life of the people of Bristol. An upward momentum is clearly a moving force in Bristol.

## PURPOSE OF THE PLAN

This Comprehensive Plan will provide a foundation over the next ten years for developing more specific projects and programs to preserve and improve Bristol. This Plan was developed with four key characteristics: it is comprehensive, it is long-range, it is flexible and it is designed to be continuous.

- Comprehensive - This Plan is based on background studies of all of the key features and trends of the Borough. The Plan provides an overview of the most major development and preservation concerns of the Borough. The Plan will help coordinate all projects and actions into the overall picture.
- Long-Range - This Plan stresses the impacts of different actions over the long-term. Short-term recommendations are laid out to best accomplish the long-term goals. By always looking ahead, we can avoid serious problems in the future. We can obtain the most benefits for every action and we can avoid missing opportunities.
- Flexible - This Plan must be seen as flexible. Opportunities will arise that were not included in the Plan. New proposals should be reviewed using the Plan as an overview of what was decided to be the most desirable future for Bristol. The Plan is not meant to be a rigid program, but one that serves as a flexible guide.
- Continuous - Planning must be a continuous process. Events and changes will occur that could not be foreseen when the Plan was developed. Periodically, the Plan should be reevaluated and amended. Continually, the Borough should use the comprehensiveness of the Plan to determine what Bristol's short-term priorities should be.

## THE FORMAT OF THIS PLAN

"The Public Interest requires doing today those things that men of goodwill and intelligence will wish five or ten years hence, had been done." - Edmund Burke

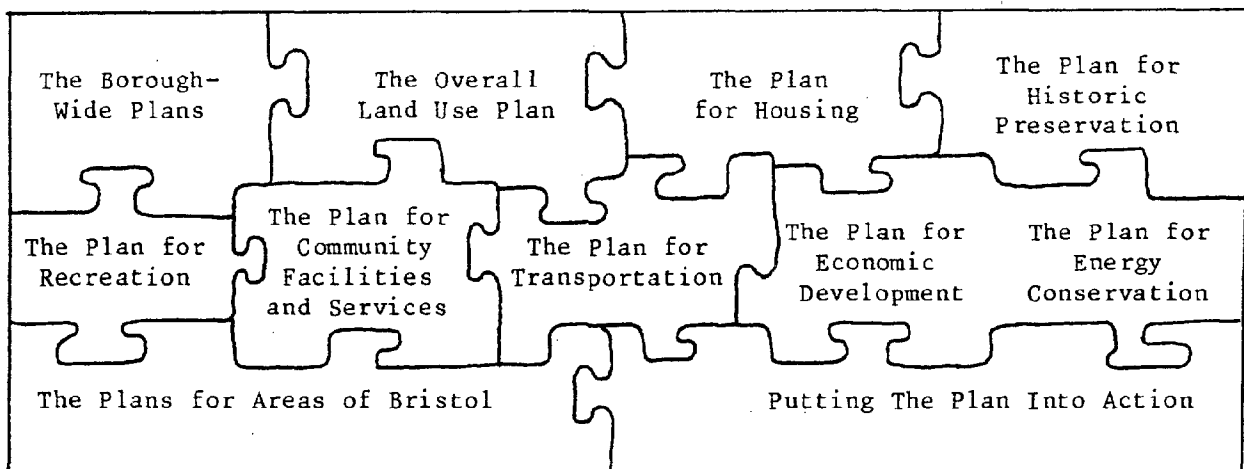
As can be seen in the Table of Contents, there are eight major sections to this document. The Major Goals define the goals that motivate this Plan and its recommendations. Then, there is a brief description of the Background Studies which examined in detail existing conditions and trends throughout the Borough.

The Comprehensive Plan Map is probably the most important page of this Plan. Changes in zoning districts will be based upon this Map. The Borough-Wide Plans are proposals for the entire Borough. These are broken down into eight subject areas: Land Use, Housing, Historic Preservation, Recreation, Community Facilities and Services, Economic Development, Transportation and Energy Conservation.

The Plans for the Areas of Bristol use the major goals and objectives of the Borough-Wide Plans to make specific recommendations for each neighborhood and section of Bristol. The next section is Putting the Plan Into Action. This section will serve to help carry out the recommendations and policies of the Borough-Wide Plans and the Area Plans. This section also includes a Program of Actions that are recommended to be carried out immediately.

The nine major parts of this Comprehensive Plan fits together like a puzzle to provide an overall framework for the future of Bristol.

### THE BRISTOL COMPREHENSIVE PLAN



THE FOUNDATION FOR THE PLAN

The Background Studies  
Bristol Within the Region  
A Brief History of Bristol

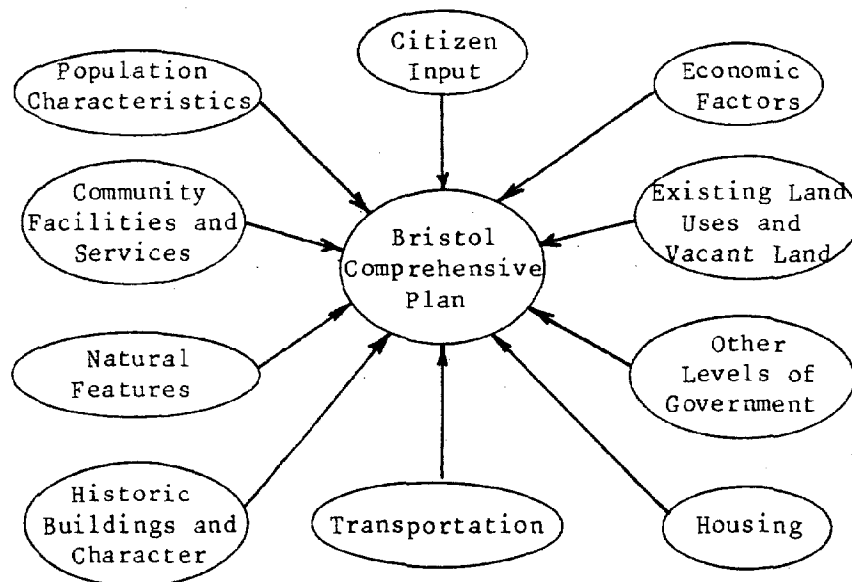
# THE FOUNDATION FOR THE PLAN:

## THE BACKGROUND STUDIES

"If we could first know where we are and whither we are tending,  
we could better judge what to do and how to do it." - Abraham Lincoln

The Bristol Comprehensive Plan was developed over a year-long period of careful study of all of the different aspects of Bristol and surrounding areas. These studies provided knowledge and insights to the Planning Commission on current trends and how all the different factors in Bristol's future are interrelated.

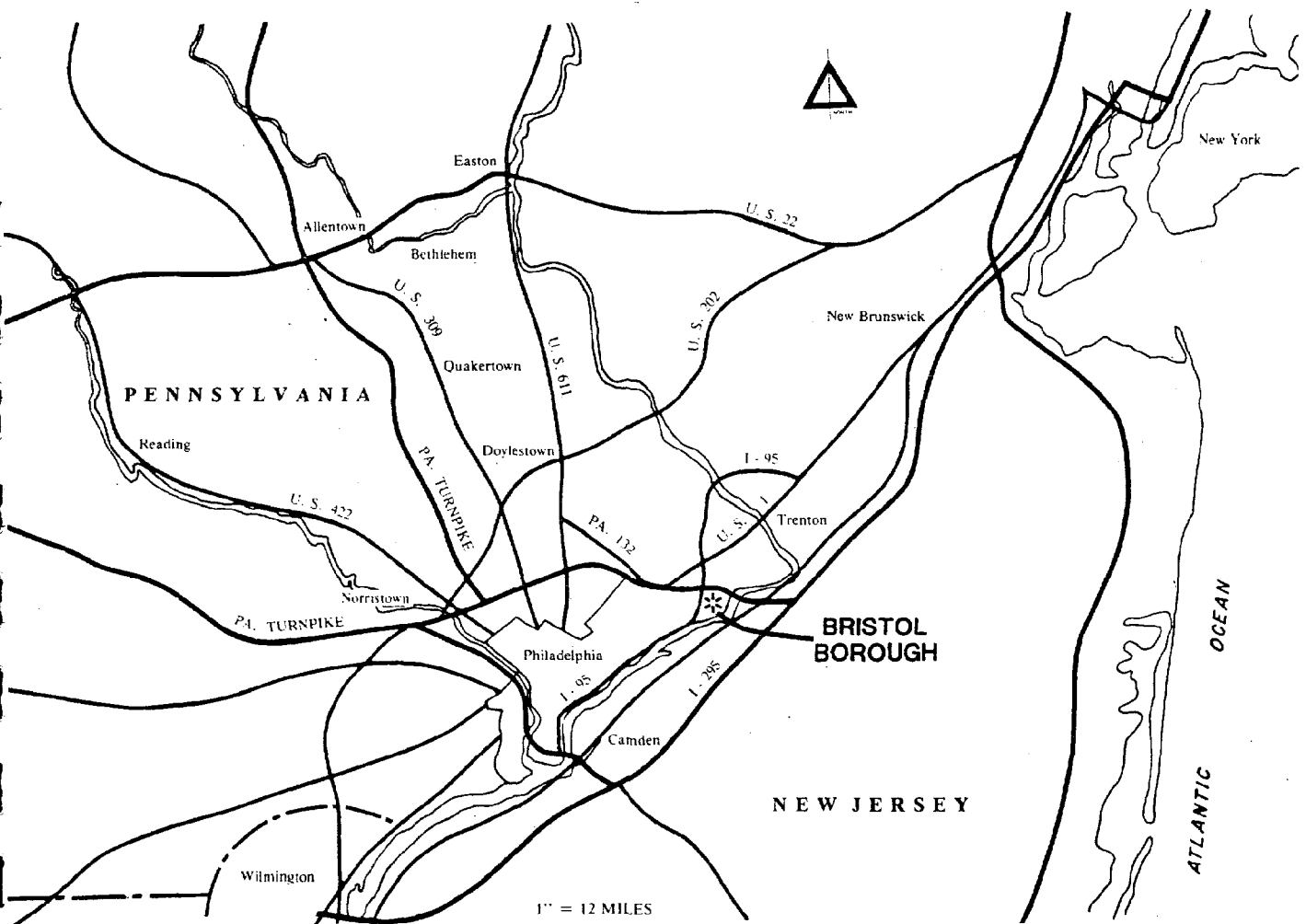
The major findings of the Community Facilities, Land Use, Transportation and Natural Features background studies have been integrated into the Plan. The major findings of the Population, Housing and Economic Background Studies are included at the end of this document. The complete set of detailed background studies and maps are available for review in the Municipal Building.



## BRISTOL WITHIN THE REGION

Bristol enjoys a highly strategic location. Bristol has all the benefits of older livable neighborhoods, but it is also located within the dynamic suburban area of Lower Bucks County, within the Philadelphia-Trenton Metropolitan area. Many major employment centers are easily accessible.

The Pennsylvania Turnpike and Interstate 95 both have interchanges just outside of Bristol, providing excellent connections to the fastest growing parts of the metropolitan area, and to the entire Middle-Atlantic Region. The Bristol Station of SEPTA's High Speed Commuter Railroad System provides for easy commuting to Center City Philadelphia, only twenty miles away. Trenton is less than ten miles away.



## A BRIEF HISTORY OF BRISTOL 1697-1986

Compiled from the works of the Bucks County Planning Commission,  
Lois Glamann Gratz and the Radcliffe Historical and Cultural Foundation

Bristol rightfully takes pride in its rich and textured history. One of the oldest communities in Pennsylvania, the area we know as Bristol has been settled for over three hundred years.

The year before the Province of Pennsylvania was established, the Provincial Governor of New York granted 262 acres to Samuel Clift in 1681. Settlers began to move into the area, which had been inhabited by the Lenni-Lenape Indians. The settlers tried to have their area chosen as the capitol city for William Penn's new Province of Pennsylvania. However, a site downriver more favorable for shipping was chosen as the site for "Philadelphia."

By 1697, the settlers had become sufficiently established to receive permission from the Province to lay out a town. The name "Buckingham" was chosen at first, which was changed sometime after 1700 to the name "Bristol."

A year before Bristol was officially established, the Province authorized the construction of a major road, "The Kings Highway" to connect Philadelphia and Morrisville. This road travelled along the route of present day Radcliffe Street, and was the first public road in Bucks County.

### THE MARKETPLACE FOR THE REGION

Sometime after 1700, the name of Buckingham was changed to Bristol. By this time, Mill Street had become the major marketplace for the surrounding region. Timber mills and grist mills in Bristol processed and shipped the products of the surrounding farms.

From 1705 to 1725, Bristol was the County Seat of Bucks County, generating much activity in the town. By 1714, a ferry was operating across the Delaware River between Bristol and Burlington, New Jersey, one link in Bristol's important role in transportation.

The early settlers were religious people, establishing several churches, including St. James Episcopal Church in 1712. The Friends Meeting House, completed in 1711, remains the oldest building in Bristol. Bristol was also home of the first Black Church in Bucks County.

On November 14, 1720, Bristol was officially incorporated as a borough. This made Bristol the first borough in Bucks County and the third oldest in the entire State.

Markets and festivals were popular in Bristol throughout most of the 1700s. These included street markets every Thursday and a three-day fair every October.

In 1740, a shipyard was built in the rear of Mill Street near Wood Street. Many ships were produced by this shipyard throughout the 18th and 19th centuries.

A stagecoach travelled between Bristol and Philadelphia by 1755. Within fifteen years, Bristol was part of the regular route between Philadelphia and New York City. A revolution in transportation, a ship powered by steam instead of wind, received one of its very first trials off of the Bristol Wharf in 1787. By 1790, regular steamboat service operated between Bristol and Philadelphia.

#### BRISTOL AS A RESORT

Throughout the later half of the 1700s and the first quarter of the 1800s, Bristol was a popular resort area. Many vacationers were attracted by the Delaware River's scenery and cooling breezes. Bristol was a pleasant break from Philadelphia, then the largest city in North America. Steamboats carried vacationers and sightseers from Philadelphia to Bristol every day. A major nearby attraction was Bath Springs which offered water with purported healing powers.

Radcliffe Street attracted many affluent persons who constructed beautiful homes of many different architectural styles. These included many persons building second homes that served as pleasant escapes from their work in Philadelphia, then the nation's capital.

George Washington stopped briefly in Bristol in 1790 on his way to his inauguration as the first President. The King George II Inn, built in 1765 beside the wharf for the ferry, served as a popular rest stop for visitors such as Presidents Madison, Tyler and Fillmore. General Lafayette, remembering the excellent care he received in Bristol after he was wounded during the Revolutionary War, returned to Bristol in 1824 for a fabulous banquet and celebration.

#### THE CANAL AND RAILROAD BRING GROWTH

By 1832, Bristol included 200 homes, three churches, a bank, four taverns and seven stores. This is the year that saw the completion of the Delaware Canal. The Delaware Canal was built along the Delaware River extending over 60 miles, from Easton to Bristol. It allowed coal and other products to be transported more easily and less costly from the coal regions of northern Pennsylvania to Bristol, where it was shipped to Philadelphia and New York City.

A few years later, one of the nation's earliest major railroad lines was built through Bristol, eventually connecting New York City and Philadelphia. This railroad is the present-day "spur route," which runs nearly parallel to the Delaware Canal. Several major industries located between the canal and the railroad, developed to make use of these transportation facilities.



## BRISTOL ANSWERS ADVERSITY

By the mid 1800s, Bristol's great prosperity began to decline. When the new railroad began shipping coal, and outlet locks were constructed in New Hope, the canal trade was lost to Bristol. However, the people of Bristol were not about to give up. In 1876, local citizens found the Bristol Improvement Company. The Improvement Company built new industrial buildings between Beaver Street and Jefferson Avenue. They then promoted the advantages of Bristol, attracting new industries. Some of the new factories were sold to industries, while others were leased. These efforts spurred tremendous growth in industrial employment, especially in textiles, but also in wall-paper, carpets, iron and leather.

Immigrants were attracted to Bristol to work in the new factories. They came from many countries, including Italy, Ireland, Germany, Poland and Czechoslovakia. Housing for these workers was built within easy walking distance of the factories.

## BRISTOL RESPONDS TO WORLD WAR I

After the U. S. entered World War I, Bristol had an important role to play. Ships were desperately needed fast to get food, troops and equipment to Europe. The Federal Fleet Emergency Corporation authorized a shipyard and housing for its workers to be built just outside of Bristol. The shipyard included twelve concrete shipways and a 1,135 foot long fitting out pier. Averill Harriman oversaw construction of the model community that now bears his name, the "Harriman" section of Bristol. This area was annexed into Bristol Borough in .

## BETWEEN THE WARS

Bristol tried to respond as best it could to the Great Depression. It was during this time that Joseph R. Grundy, son of industrialist William R. Grundy, rose to prominence. Joseph Grundy served as a U. S. Senator and operated the Bristol Worsted Mill. He also served on Bristol Borough Council for many years and was influential in establishing many major public improvements in Bristol.

Joseph Grundy's death in 1961 did not bring an end to his contributions to the improvement of Bristol. Through the Grundy Foundation, his fortune and spirit continue to help bring dramatic benefits to the people of Bristol and Bucks County. The combined efforts of the Grundy Foundation and many Bristol citizens have brought a great many great ideas into reality. These advances include Grundy Towers, Grundy Ice Rink, many fine parks, the Grundy Museum, the Grundy Library and the Mill Street Parking Lot.

## WORLD WAR-II

After World War I, the Harriman shipyard was acquired by the Keystone Aircraft Company to produce small seaplanes. A seaplane hanger and ramp into the Delaware River still exists. When World War II struck, this factory was taken over by the Kaiser Fleetwings Company to build wings for military aircraft, including the famous "Hellcat" Navy fighter plane. The period after World War II saw the dramatic suburbanization of most of surrounding Lower Bucks County, spurred by new highways, more automobiles and the new U. S. Steel Fairless Hills plant.

CHOOSING OUR DIRECTION : MAJOR GOALS

# CHOOSING OUR DIRECTION

## MAJOR GOALS

"WHERE THERE IS NO VISION, THE PEOPLE PERISH."

The decisions we make or fail to make today will influence our lives tomorrow. Our choice is to wait passively for the future to happen and then deal with situations after they become problems, or to plan ahead and together take control of the future of our community.

The following goals express the major aims of the Comprehensive Plan. These outline the major motivations of the Plan and the major destinations we realistically wish to reach in the long-run. These goals will be carried out through the recommendations included in the Borough-Wide Plans and the Plans for Areas of Bristol in later sections of this document. These goals are not listed in their order of importance, but in the order in which they are discussed in this document.

- TO FULLY RESPECT THE NATURAL FEATURES OF BRISTOL IN ALL DEVELOPMENT.
- TO REDUCE AND AVOID CONFLICTS BETWEEN DIFFERENT USES OF LAND, ESPECIALLY WITHIN RESIDENTIAL NEIGHBORHOODS.
- TO ENHANCE THE ATTRACTIVENESS OF BRISTOL, ESPECIALLY AT MAJOR ENTRANCES TO THE BOROUGH.
- TO IMPROVE THE PHYSICAL, SOCIAL AND ECONOMIC WELL-BEING AND STABILITY OF ALL OF BRISTOL'S NEIGHBORHOODS.
- TO RESPECT, PRESERVE AND ENHANCE BRISTOL'S SPECIAL HISTORIC CHARACTER AND BUILDINGS.
- TO ENCOURAGE TOURISM IN BRISTOL TO EXPERIENCE ITS NATURAL FEATURES AND HISTORIC RESOURCES.
- TO SEEK HOUSING OF ADEQUATE QUALITY FOR ALL BRISTOL RESIDENTS.
- TO MAINTAIN AN APPROPRIATE POPULATION DENSITY IN ALL NEIGHBORHOODS OF THE BOROUGH.
- TO SEEK A HIGHER LEVEL OF INVESTMENT AND REHABILITATION IN BRISTOL'S HOUSING STOCK.
- TO SEEK A HIGHER TAX BASE IN THE BOROUGH TO REASONABLY SUPPORT A HIGH LEVEL OF PUBLIC SERVICES.
- TO SUPPORT AND PROMOTE THE GROWTH OF COMMERCIAL AREAS, ESPECIALLY THE MILL STREET BUSINESS DISTRICT.

- TO AGGRESSIVELY SEEK THE BEST USE OF VACANT AND UNDERUSED LAND, ESPECIALLY AREAS APPROPRIATE FOR LIGHT INDUSTRIES AND BUSINESSES.
- TO PROMOTE THE RETENTION OF EXISTING JOBS AND THE DEVELOPMENT OF NEW JOBS WITHIN THE BOROUGH AND IN SURROUNDING AREAS.
- TO ASSIST DISADVANTAGED BRISTOL RESIDENTS IN IMPROVING THEIR JOB SKILLS.
- TO EFFICIENTLY DELIVER A HIGH LEVEL OF IMPORTANT COMMUNITY SERVICES AND THE FACILITIES NEEDED TO PROVIDE THEM.
- TO CONTINUE TO PROVIDE A HIGH LEVEL OF RECREATIONAL FACILITIES AND LEISURE ACTIVITIES.
- TO IMPROVE PUBLIC ACCESS AND RECREATIONAL OPPORTUNITIES ALONG THE DELAWARE RIVER.
- TO ENSURE A SAFE AND EFFICIENT TRANSPORTATION NETWORK, INCLUDING RAIL, TRUCK, AUTO, PUBLIC TRANSIT, BICYCLE AND PEDESTRIAN TRAVEL.
- TO WORK TOWARDS A HIGHER LEVEL OF ENERGY CONSERVATION.
- TO MAKE BEST USE OF THE ENERGY, ENTHUSIASM AND PARTICIPATION OF THE CITIZENS AND ORGANIZATIONS OF BRISTOL.
- TO MAKE BEST USE OF THE SUPPORT, RESOURCES AND FUNDING AVAILABLE FROM AGENCIES AND ORGANIZATIONS OUTSIDE OF BRISTOL.

THE BOROUGH-WIDE PLANS

The Overall Plan for Land Uses  
The Comprehensive Plan Map  
The Plan for Community Facilities  
and Services  
The Plan for Recreation  
The Plan for Transportation  
The Plan for Housing  
The Plan for Economic Development  
The Plan for Historic Preservation

## THE OVERALL PLAN FOR LAND USES

GOAL: TO REDUCE AND AVOID CONFLICTS BETWEEN DIFFERENT USES OF LAND, ESPECIALLY WITHIN RESIDENTIAL NEIGHBORHOODS

- Revise Zoning Ordinance to Carry Out the Comprehensive Plan Map.

The Comprehensive Plan Map was developed with a chief concern of separating uses that often cause conflicts with other types of uses. This remains the chief intent of the zoning ordinance, which will be revised and updated in 1986.

- Uses Permitted in Residential Zoning Districts Will Be Carefully Controlled.

A major intent of this Plan is to ensure the stability of residential neighborhoods. By avoiding and eliminating nuisances in neighborhoods, life for current residents is more pleasant and investment of work and money in the neighborhood is encouraged.

- Nonconforming Industrial and Commercial Uses in Residential Neighborhoods Will Be Carefully Controlled.

Some individual industrial and commercial uses exist in residential areas. Many of these are convenience stores and services that primarily serve the surrounding neighborhood. This Plan encourages these businesses to continue in operation. Those businesses that would not be permitted to be built under current zoning are called "nonconforming uses." These uses are allowed to remain but their expansion is limited.

Different methods of further controlling undesirable nonconforming uses should be investigated during the zoning revisions. The Borough will continue to enforce all of its codes that regulate any nuisances that these businesses may create. Special attention must be paid to the types of uses that are allowed to replace existing nonconforming uses.

- Cooperate With Bristol Township to Ensure That Development Along the Municipal Borders Will Be Compatible.

Bristol Township surrounds Bristol on all sides, except for the Delaware River. Because most of the land adjoining Bristol Borough is intensely developed, there is less threat of new conflicts between land uses arising. The area west of Bristol Borough, including the Rohm and Haas plant, has been zoned and planned for industrial uses by Bristol Township. Most of the land surrounding the Golf Ranch tract is zoned and planned for residential uses. Silver Lake County Park adjoins Bristol Borough to the north. Adjacent to Keystone Lighting, the Delaware Canal and most of Green Lane Road, Bristol Township has zoned and planned for industrial uses. The Edgely area adjacent to Green Lane Road in Bristol has been zoned and planned for residential uses.

GOAL: TO ENHANCE THE ATTRACTIVENESS OF BRISTOL, ESPECIALLY AT MAJOR ENTRANCES TO THE BOROUGH

- Encourage a Scale of Development That is Related to People.

Most of Bristol has a tightly-knit urban fabric that should be maintained and strengthened. The intent is to encourage even more use of walking throughout the Borough. An active street life not only makes life more interesting, but can lead to safer streets.

Promoting development scaled to the size of people is especially important in the older areas of Bristol. Appropriate types of buildings should be encouraged to fill in vacant areas along streets for a continuous and active street frontage. Parking lots should be partially buffered by low walls, trees or low shrubs from the sidewalks and road.

The concept of "development scaled to people" is explained more fully in the Plan for the Mill Street/Otter Creek Marsh Area and in the Plan for Historic Preservation. The proposed trail system is discussed in the Plan for Transportation.

- Improve the Appearance of Commercial Areas Along Major Roads.

Much can be done to improve the appearance of certain commercial areas in the Borough, such as those along Old Route 13 and U. S. Route 13. Existing property owners can be encouraged to voluntarily make improvements to their properties. This could include general paint-up and fix up, landscaping and replacing unattractive and cluttered signs. Also, the Borough can work to improve the appearance of these areas whenever new land development is proposed. The Borough's development regulations should include requirements to make areas more attractive, such as grass strips between parking lots and the street right-of-way line.

- Murals Should Be Encouraged in Key Locations.

Murals, both large and small, can brighten up and add real interest to an area. Murals could be painted along an exterior wall of a building. The murals could be accomplished by a wide range of methods including design competitions for high school or college art students.

- Banners Across Streets Can Add Great Color.

Large banners at appropriate locations can add great color and excitement to a street. Banners are often used to advertise fundraisers by nonprofit organizations. However, if carefully reviewed and licensed, attractive commercial messages might also be appropriate.

- Improve the Appearance of Major Entrances to Bristol to Identify the Community, Attract Visitors and Promote an Improved Public Image.

Bristol has several major entrances, most of which give no hint of the specialness of the community that lies ahead. The major concern is that the first image a person gets of a community often leaves a very lasting impression. At the same time, there is much need for better signage to Bristol, especially from Route 13. Attractive signage, especially signs that stress Bristol's historic character, can provide a truly positive effect.

The following are some of the major entrances to Bristol that deserve treatment:

- Route 13 and 413 - The new Bristol Commerce Park should create a very attractive addition to this entrance. The final development plan should be reviewed with this objective in mind.
- AMTRAK should to be urged to improve the appearance of the railroad bridge at this intersection and adjacent billboards on AMTRAK property. Advertising signs on the bridge and adjacent property could be attractive if properly designed and maintained.
- Route 13 and Bath Road - The major feature on this entrance that needs to be addressed is advertising on the railroad bridge. Again, advertising could be attractive if well-designed and maintained.
- Route 13 and Beaver Street - This area holds great potential for improvement. The southeastern corner of Beaver Street and Route 13 is presently used as overflow parking for a small retail outlet. Great potential exists for turning this corner into an attractive "Gateway" green space to identify Bristol.

Also, on the southwestern side of this intersection is a vacant commercial property. A corner of this lot might be purchased by PennDOT and or the Borough for road improvements and a green space.

- Green Lane Road and Route 13 - This generally is not an unattractive entrance but there is no identification of Bristol Borough. An attractive historic-style sign could also be placed here to direct persons to the Delaware Canal which passes under Green Lane.
- Otter Street and Old Route 13 - This is a very confusing section of roadway. Although a State historic sign describing Bristol already exists on Otter Street, it is difficult to read because of the highway conditions in this area. Better signage and landscaping in this area should define the entrance to Bristol.



- Otter Street and Bath Road - This intersection is a major entrance to the Mill Street Business District. A portion of this site should be acquired or leased to allow a sign to be erected identifying and directing people to Mill Street. Efforts should be made to seek improvements in the attractiveness of commercial property on the south side of this intersection.

- Establish a Street Tree Planting Program.

Street trees can add greatly to the attractiveness of any street. They make more pleasant surroundings for existing residents and encourage a higher level of investment in the neighborhood. A program for street trees should be considered along several of the major roads in Bristol including Bath Road, Radcliffe Street, Pond Street, Farragut Avenue, Beaver Dam Road and Jefferson Avenue. A street tree program should also be considered on smaller roads in residential neighborhoods.

GOAL: TO FULLY RESPECT THE NATURAL FEATURES OF BRISTOL IN ALL DEVELOPMENT

- Wetlands, Including the Otter Creek Marsh, Should Be Preserved, Protected and Enhanced.

Wetlands are very important to preserve because of their great importance in the ecological system. Wetlands nurture plant and animal life that provides great amounts of food for fish and animals. Wetlands provide spawning grounds for fish and resting areas for many migratory waterfowl. Also, wetlands are important for flood control and the recharge of groundwater.

The preservation and protection of wetlands is a major and clearly stated goal of the Pennsylvania Coastal Zone Management Program. Also, permits for any activity impacting wetlands are required by the Pennsylvania Division of Coastal Zone Management and the U. S. Army Corps of Engineers.

The Otter Creek Marsh includes freshwater tidal wetlands that are being developed into a nature preserve and study center by The Nature Conservancy, a national nonprofit organization. This Plan recommends the extension of this nature preserve into all adjacent wetlands, especially areas within the legally defined "100-Year Floodway."

The Nature Conservancy's proposed plans are more fully discussed in The Plan for the Mill Street/Otter Creek Marsh Area.

- Carefully Controlled Development in the 100-Year Floodplain.

The Borough will revise its zoning ordinance to bring it into full compliance with the Pennsylvania Floodplain Management Act, which regulates development in a legally designated "100-Year Floodplain" area. This is the area that is expected to be flooding during the worst flood in 100 years. This area is shown on the Environmentally Sensitive Areas Map.

- Work to Carry Out the Goals and Policies of the Pennsylvania Coastal Zone Management Program.

Much of Bristol is located within the official "Coastal Zone" that was designated by the Commonwealth of Pennsylvania under the U. S. Coastal Zone Management Act. The official policies of the management program of Pennsylvania have been incorporated throughout this Comprehensive Plan. The Coastal Zone includes all land adjacent to the Delaware River, lands along Otter Creek between Old Route 13 and the Delaware River, vacant parcels near the River's edge, the Mill Street area, the Radcliffe Street area and the Purex complex. The zone averages about 1/8 mile in width from the River.

Under the Coastal Zone Program, many of the special attributes of Bristol have been recognized. Much of the Coastal Zone that is within Bristol has been designated as "Geographic Areas of Particular Concern." These areas have been determined to require special management procedures or to involve issues of greater than local concern. The area of the Borough between Maple Beach Road and the Delaware River, to the south of Otter Creek, is designated as part of a "Development Opportunity Area" that is especially suited to more intensive uses. This area also includes large areas in Bristol Township around the Burlington-Bristol Bridge. The Mill Street and Radcliffe Street areas have been defined as an area of "Recreational, Cultural and Historic Value."

- Protect and Seek to Improve Water Quality of Otter Creek, Adams Hollow Creek and the Delaware River.

Water service to Bristol Borough residents is provided by water drawn from the Delaware River. Both Otter Creek and Adams Hollow Creek flow into the Delaware River.

It is important to protect the quality of water in these streams because of their importance as a source of drinking water as well as their importance as recreational resources.

- Carefully Manage Storm Water Runoff.

The proper control of storm water runoff must be carefully planned in new development. The Borough should continue its program of correcting problems in its existing storm water drainage system which cause flooding in streets and adjoining properties.

NATURAL FEATURES, FLOODPLAINS AND COASTAL  
ZONE BOUNDARY MAP

1985 EXISTING LAND USE MAP

COMPREHENSIVE PLAN MAP

## THE PLAN FOR COMMUNITY FACILITIES AND SERVICES

GOAL: TO EFFICIENTLY PROVIDE A HIGH LEVEL OF IMPORTANT COMMUNITY SERVICES AND THE FACILITIES NEEDED TO PROVIDE THEM

- Municipal Buildings - Make the Borough Garage Yard More Compatible With the Bristol Marsh Nature Preserve.

This item will be discussed further with The Plan for the Mill Street/Bristol Marsh Area. The existing Municipal Building on Pond Street is expected to be more than adequate for the Borough's needs.

- Regional Cooperation - Regularly Look For Ways of Worthwhile Cooperation Among Governments.

Cooperation with Bristol Township and other nearby municipalities can be valuable in providing services in the most efficient ways. Also, communities can work together to solve regional problems, such as traffic. Cooperation with Bucks County and the many agencies of the Federal and State government is also essential. Cooperation with Burlington, New Jersey is discussed under The Plan for Historic Preservation.

- Police - Provide a High Level of Police Protection With the Aid of Citizen Crime Watches.

In 1985, the Bristol Police Department included twelve full-time and three part-time officers. As Bristol attracts greater numbers of tourists and increased development, a higher level of police service may be needed.

No matter how many officers Bristol has, the police can never be everywhere. Citizen Crime Watches can be an important way of assisting the police. A large number of active Crime Watches throughout the region have reduced crime in neighborhoods and can provide valuable examples.

The statistics show that most crime in Bristol is relatively minor theft. The problem is that unrealistic fear of crime can be worse than crime itself. Citizen Watches are one way of making people feel more safe in their homes. Crime Watches can also serve to unite neighborhoods.

Police surveillance is important throughout Bristol. One special concern is to oversee gatherings of large groups of young people, especially young people at night, to ensure that serious laws are not being violated. The Citizens Advisory Committee stressed a specific need for increased police surveillance of the Lions Park area and the riverfront.

- Fire Protection - Provide Fire Protection Efficiently, With An Even Greater Emphasis on Cooperation Between the Five Fire Companies.

Bristol Borough benefits from very high volunteer involvement by its citizens in its fire protection. Five fire companies serve Bristol:

- Consolidated Fire Company - Pond Street adjacent to Municipal Building
- Bristol Fire Company #1 - Wood and Market Streets
- American Hose & Ladder Fire Company #2 - Hayes Street, Harriman
- Goodwill Hose Fire Company #3 - Swain and Mifflin Streets in the West Ward
- Bristol Volunteer Fire Company #6 - Farragut Avenue

All of the fire protection for Bristol is provided by volunteers, except for a few professionals that work out of Consolidated.

The fire companies in 1985 had a total of two snorkel/aerial ladder trucks, five modern pumpers, two mini-pumpers, two reserve pumpers, two specialized vehicles, a car and two boats. In addition, Borough Council has established a "Sinking Fund" to which the Borough annually gives money together with the Grundy Foundation to periodically pay for new fire equipment.

The Bristol Fire Chief uses his authority to coordinate all five fire companies. Continued emphasis on cooperation and coordination between the five fire companies will ensure the most efficient and best fire protection for Bristol.

- Rescue/Ambulance - Continue to Support Existing Services.

A professional fire fighter of the Consolidated Fire Company is at the station at all hours of the day. This person provides trained "first response" emergency medical treatment on the scene of a medical emergency. This fire fighter is supported by the semi-professional Bucks County Rescue Squad, based just outside of the Borough on Otter Street.

- Library - Even Greater Use Should Be Made By Residents.

The Margaret R. Grundy Memorial Library is located on Radcliffe Street. This excellent library, made possible through the work of the Grundy Foundation, is one of Bristol's many great resources. In addition to the library stock, this facility contains a "community room" that is available for meetings of the many organizations in the Borough.

- Solid Waste - Continued Regional Efforts Are Needed to Construct a Trash-to-Steam Plant.

The lack of available landfill space to dispose of trash is a problem rapidly becoming a crisis throughout the nation. If GROWS Landfill in Falls Township closes, Bristol's trash will have to be hauled tremendous distances causing the cost of trash disposal to rise sharply.

In 1983, Bristol joined with its neighbors to establish the Southern Bucks Solid Waste Committee (SBSWC). This organization has been working in cooperation with the Bucks County Planning Commission to develop a long-term solution to the solid waste crisis. The most generally accepted alternative is a plant that would burn trash at very high temperatures creating steam that can then be converted to electricity. The SBSWC has had to deal with many problems in trying to develop this type of plant. Regardless, these efforts should be continued.

- Solid Waste - Recycling Should Be Stressed to Decrease the Amount of Trash That Must Be Landfilled.

Many communities have had great success with recycling programs. The Borough and civic groups should strongly encourage citizens to take recyclable items to "drop-off" centers for recycling or to develop a local recycling program. These programs encourage each household to keep newspapers, aluminum and glass separate from their trash.

- Water - Annually Reinvest in Repairs to the Water System.

Bristol owns its own water system, with large pumping, treatment and storage capacities. Water is obtained from the Delaware River, seven wells in Edgely and a well in the Mill Street parking lot. A modern filtration plant is on Radcliffe Street.

The Borough should continue to regularly maintain the system and make improvements before they become absolutely necessary and therefore more expensive. "Capital Improvements Programming," to plan for funding future improvements, is discussed in the section of this Plan, "Putting the Plan Into Action."

- Sanitary Sewers - Bristol's Sewer Capacity is a Major Asset.

The Bristol Sewage Treatment Plant, off of Maple Beach Road, is a modern plant with substantial capacity available for additional growth. In comparison, many other municipalities, have had to limit new sewer connections because their sewer systems are approaching the limit of their capacity. As sewer lines age, they will continue to need regular repair. Also, continued efforts will be needed to reduce the amount of stormwater that infiltrates into the sewer system.



- Storm Water Management - Continued Attention Needs to Be Paid to Managing Storm Water.

Controlling and guiding the flow of storm water is important to avoid flooding of streets, property and basements and to avoid erosion and sedimentation. Storm sewer catch basins and drainage channels must be regularly cleaned if they are to function properly. Whenever possible, storm water should be directed using its natural patterns to avoid the need for additional storm sewers. Particular storm water concerns in the Golf Ranch tract, the West Ward and McKinley Street are addressed in the Plans for each of those areas.

- Street Lighting - Continuing to Investigate Cost Effective Alternatives

Street lighting is a very major expense for Bristol (\$118,000 in 1985). At the same time, many areas of Bristol could benefit from increased street lighting. Street lighting is important to prevent crime, to increase feelings of safety and to avoid traffic accidents.

The Borough should carefully investigate the many different alternatives available for street lighting. Some communities have found it actually less expensive to replace all of their existing lamps with more energy efficient types. Care should be taken to avoid lighting of inappropriate color or harshness in historic and residential sections.

- Schools - The Existing Elementary School and Junior-Senior High School Are Expected to be Adequate.

Enrollment in the Bristol Borough School District declined significantly over the past several years, from 1,512 in 1979-80 to 1,339 in 1984-85. Although a slight increase in enrollment is expected, the existing schools should have more than enough space. Two Catholic elementary schools, St. Ann's and St. Mark's are also within Bristol.

- Day Care - A Higher Level of Day Care Service Is Needed.

Only a few day care programs are currently active in Bristol. Proper day care is especially important for single parent households and households where both parents work. Day care services are also necessary for children who attend school but whose parents are not home from work before school is out.

- Senior Citizens - Services Are Important, Especially Alternative Forms of Health Care.

Like most of Pennsylvania, the population of Bristol is aging. In 1980, 998 Bristol residents were between ages 65 to 74 and another 569 residents were 75 years and older. This is causing increased needs for many types of services. The Bristol Senior Citizens Center already provides a great variety of services to area senior citizens. Efforts must be made by all levels of government to develop more services to senior citizens. These services might include matching senior citizens together to share their homes and their housework, providing "meals on wheels," providing more health care services in a person's own home and providing day care and occasional weekend care for seniors who are being cared for by their relatives.

COMMUNITY FACILITIES MAP

## THE PLAN FOR RECREATION

GOAL: TO CONTINUE TO PROVIDE A HIGH LEVEL OF RECREATIONAL FACILITIES AND ACTIVITIES

- Preserve Sections of the Delaware Canal That Are Owned by the Borough and Have Not Been Filled In.

The Borough owns all of the former Delaware Canal right-of-way that passes from behind Keystone Lighting Company to behind Mill Street. State Act 35 of 1961 turned over the canal and adjacent land on both sides from Canal's End Road to Adams Hollow Creek to Bristol. The law stated, "The Borough is to maintain the property for parking or public purposes." Bristol should realize the great resource that the Canal represents for recreation, history and tourism.

Individual sections of the Canal have been filled in to construct the Mill Street parking lot and Snyder Elementary School. Where the canal bed still exists, it should remain in open space. Any development adjacent to the Canal should be set back from it and preferably buffered by landscaping. As funding allows, efforts might be made to uncover certain sections of the canal, such as between Beaver Street and Washington Street, especially where it is feasible to have water running through the Canal. Over the very long term, it might be financially possible to uncover and restore large parts of the Canal, including some of the locks behind Buckley Street. Sections of the Canal are discussed in The Plans for Areas of Bristol.

A trail system along the path of the Canal should be developed. This is discussed under later objectives.

- Work With the Theodore Roosevelt State Park to Improve State-owned Sections of the Delaware Canal.

The Delaware Canal, from behind Keystone Lighting Company to Green Lane Road, is part of the Theodore Roosevelt State Park. This section of the Canal is somewhat isolated but is heavily used for fishing, walking and bicycling.

In 1986, a major effort was initiated to develop a Master Plan for the entire Delaware Canal, from Easton to Bristol. Bristol should be involved in these efforts. These efforts could result in a more reliable stream of water in the Canal and could result in regular stocking of the Canal by the Pennsylvania Fish Commission.

Residents and groups should organize together to periodically clean up the Delaware Canal. Excellent opportunities for clean-ups might be provided when the water level of the Canal is low or no water is flowing. Normally, the Canal is only a few feet deep. The Borough government and the State Park might be able to provide equipment and trucks.

- Develop a Complete System of Pedestrian Walkways and Bikeways That Are Linked Together Throughout Bristol.

A recommended system of pedestrian walkways is shown on the Comprehensive Plan Map. It will be necessary to develop this system in phases, as financing and labor are available.

The different types of trail, such as waterfront, nature trail, commercial and historic might be distinguished by different types of surfaces and paving materials and signs.

Each type of trail could be developed independently, with the final system eventually resulting. The planning and implementation of each trail or portion of trail might be sponsored by an individual organization or business. The different components of this walkway system are described below:

- The Delaware Canal towpath from Green Lane Road to the Grundy Ballfields should be promoted as a bikeway and walkway - The Canal and its towpath in this area are part of the Theodore Roosevelt State Park. The towpath is widely used for bicycling and fishing. Improved maintenance is needed of this area and a general cleaning of the Canal.
- A walkway should be developed along the Delaware Canal right-of-way from Jefferson Street, around Warren Snyder Elementary School to the Water Department Shed on Canal's End Road - The land for this walkway is entirely owned by the Borough and the School District. Water is usually in the Canal from Green Lane Road to Dorrance Street. It is recommended that the area from Dorrance Street to Beaver Street be excavated as development occurs in the area. Because Warren Snyder Elementary School was built over the Canal, the pathway must go around it. The path would then continue between Grundy Towers and Buckley Street.

Where the Canal right-of-way meets Bath Road, steps could bring it up to cross Bath Street. A more costly alternative would be to excavate the old canal bed beneath Bath Street.

From Bath Street, the walkway would split to lead people to Mill Street or to the Water Department Shed on Canal's End Road and the nature trails of the Bristol Marsh Nature Preserve. The Water Department Shed is proposed to be converted into a visitor's center and museum, as described in The Plan for Historic Preservation and Tourism.

- Nature trails should be developed in the Bristol Marsh Nature Preserve, connecting into the Delaware Canal towpath and the riverfront walkway - This is described under The Plan for the Bristol Marsh Nature Preserve.

- A riverfront walkway should be developed from the Bristol Marsh Nature Preserve and along Lions Park - This walkway would be integrated with the improvements proposed for Lions Park. This walkway is discussed under The Plan for the Riverfront/Lions Park.
- Through streetscape improvements, sidewalks on Mill Street should be promoted as part of a historic walkway - This is discussed under The Plan for the Mill Street Area.
- An historic walkway should be promoted along Radcliffe Street connecting Mill Street and the riverfront walkway with the parks around the Grundy Library - A brochure for a self-guided walking tour might be developed to help visitors and residents more fully appreciate this area.
- A linear strip of land should be reserved along the entire length of the spur track right-of-way for a walkway system - This walkway would start with the walkway along the Canal bed at the Water Department Shed. It would then continue along the north side of Pond Street past Grundy Towers. Then it would continue past Leedom Carpet Mills, integrated into the redevelopment of that building.

The pathway would then pass around the Grundy tennis courts along the Canal and then around the proposed athletic fields of the High School. From the High School it would continue along a thin strip of green space on the edge of Trenton Avenue.

The spur track pathway would also connect into the Canal towpath at other appropriate locations, using the sidewalks of Beaver Street and Jefferson Street.

- Promote a Variety of Recreational Programming For All Ages and All Seasons.

The Borough presently sponsors a modest summer recreation program. In addition, the Bucks County Senior Citizens Center, at the corner of Mulberry and Wood Streets, provides a wide variety of activities for area senior citizens. Also, churches and numerous other clubs and organizations sponsor many activities.

Efforts by volunteer groups to sponsor recreation programs should receive the full support and cooperation of the Borough and the School District. Periodically, the Borough and School District should consider expanding summer and after school recreation programs.

- Warren Snyder Elementary School Has Adequate Facilities.

This school includes a gymnasium, a softball field, two sets of play equipment, a macadam play area, two basketball courts and several acres of open space.

- Additional Facilities Should be Developed Behind the Junior-Senior High School.

The High School includes a gymnasium, a football field with bleachers, a track and three basketball goal posts. Additional facilities and land are sorely needed. When the Borough receives title to the rail spur lands, lands immediately behind the High School should be made available to the Bristol School District. Related concerns are discussed in The Plan for the Harriman Area.

- Limited Facilities Are Available at St. Mark's and St. Ann's Parochial Schools.

Each of these schools includes a multi-purpose room and a macadam play area. Reasonable proposals for additional public parkland in the areas of these schools should be considered.

- The Fullest and Best Use Should be Made of All the Public Schools and Other Public Buildings.

The Elementary and High Schools should be thought of as Community-Education-Recreation Centers, not just as schools. Appropriate uses should be made of the facilities throughout the entire day, week and year. The School District should continue to make their facilities, especially the gymnasiums, available to responsible organized groups outside of school hours and needs.

- Many Excellent Public Parks and Facilities Are Located in the Jefferson Avenue/Prospect Avenue Area.

Many of the facilities along Jefferson Avenue were developed with substantial assistance from the Grundy Foundation. These include the Grundy indoor Ice Rink/Recreation Center, tennis courts, an outdoor ice skating rink and open space adjacent to the Canal. Four baseball fields with lights, bleachers and dugouts are also off of Jefferson Avenue. Across from the Railroad Station are two basketball courts and play equipment.

- Support the Development of Recreation Facilities by Private Clubs and Businesses in Appropriate Locations.

One major existing private recreation facility is the Anchor Yacht Club, located along the Delaware River near the Purex Plant. The Yacht Club includes a boat ramp, a clubhouse and boat storage areas. Another major facility includes a club and pool that the Italian-American Mutual-Aid Association operates for its members.

- Support the Continued Development of Facilities at Bucks County Silver Lake County Park.

Silver Lake County Park is a large park mostly north of Route 13 built around an expansive lake. The park is maintained by the Bucks County Park Commission. Picnic areas, ballfields and play equipment exist within Bristol Borough. Nearby is a pool, boat ramps and an environmental education center.

- Support Continued Development and Possible Expansion of the Bristol Marsh Nature Preserve.

This is discussed under The Plan for the Bristol Marsh and The Overall Land Use Plan.

- Park Planning Guidelines.

General park planning guidelines can aid communities in deciding if any additional recreational lands or facilities are needed. These guidelines should be considered along with many other factors. One factor that should be considered is how much certain facilities are in demand, such as for ballfields by organized groups. Another factor would be how well facilities are spatially distributed. Another factor would be whether a certain facility, such as a swimming pool, is available anywhere in the area. All the factors should be then balanced with the potential capital and maintenance cost of a facility compared to its expected use.

#### PARK PLANNING GUIDELINES

Classification	Function	Size	Population	Service Area
Local Park	Small recreation areas such as playlots or miniparks normally provided in built up areas where space is at a premium. The facilities which are primarily intended for children up to seven years include play apparatus, a paved area, benches, sand areas, landscaping, quiet time areas, and multi-purpose courts.	Up to one acre	500- 2,500	Sub-neighborhood
Neighborhood Park	These moderately sized parks should adjoin public elementary schools whenever possible and serve as a center for education, recreation and cultural activities for the people of a neighborhood. Active and passive recreation areas for children and adults should be complemented by attractive landscaping.	5 to 20 acres	2,000- 7,500	1/4 to 1/2 mile
Community Park	The larger community park should whenever possible, adjoin junior and senior high schools. While having many of the same facilities as the neighborhood park, the community park has facilities which require more space such as tennis courts, swimming pool, multi-purpose courts, extensive ballfields, community center building and adequate off-street parking.	20 to 100 acres	7,500-35,000	1/2 to 3 miles

## PARK PLANNING GUIDELINES

Classification	Function	Size	Population	Service Area
Open Space & Conservation Area	Steep slopes, floodplains, low wet areas, dense woodlands and other areas of conservation significance constitute these areas. Although preservation-oriented, limited and scattered recreation activities such as hiking, fishing, nature study, picnicking, biking and other activities which do not disturb the environment would be encouraged in these areas.			Distributed wherever appropriate to protect natural resources

SOURCES: National Recreation and Park Association, National Park, Recreation and Open Space Standards; and, Urban Research and Development Corporation, Bethlehem Area Recreation, Parks and Open Space Plan, 1975.

Generally, using the park planning guidelines, Bristol is well-endowed with community park and neighborhood park facilities. A problem exists in Bristol with the large numbers of children who play and ride their bicycles on the town's narrow streets. This relates to the limited number of small local parks and playgrounds in many neighborhoods in the Borough.

- Promote the Development of Very Carefully Designed and Located Small Totlot Parks.

Totlots are small parks specifically designed for small children. The 1965 Comprehensive Plan stressed the need for several totlot parks within dense residential neighborhoods. Three were built: on Cedar Street, on Second Avenue and on Pond Street at Wilson Avenue. The parks on Cedar Street and Second Avenue were not considered to be successful and were closed. A clear understanding is needed of exactly why these parks were considered to have been unsuccessful. One of many factors may have been lack of maintenance. If totlots can be designed, sited, maintained and supervised so that they can be successful, totlots should be developed. Specific areas of need are the West Ward and the east side of Harriman.

One method that has helped small parks succeed in other urban communities is to have responsible organized groups of citizens or a church sponsor a totlot. The general concept is that parents of children who need a park will make a real effort to make it work, if specifically presented with that responsibility.

The neighborhood or other civic or church group could be responsible to accomplish routine maintenance and cleaning. Residents would make a special effort to keep watch over their park and report any security concerns to the police.



Some general principles may help in planning totlots:

- Totlots should be completely fenced in for security and to avoid hazards to wandering children.
- Totlots should be closed during dark hours. It may be possible for the police to routinely lock and unlock the gates on their regular patrols. This might also be accomplished by neighbors.
- Every effort should be made to keep different age groups apart. A children's playground, for example, should not be next to a basketball court or parking lot.
- Totlots should be supervised by neighborhood volunteers during any problem times of the day.
- Totlots should be highly visible from the street.
- Totlots might be located beside community facilities, especially churches, that attract activity by responsible citizens.
- Totlots should be visible from windows of nearby homes, where they can be overseen by residents.

- All New Recreational Facilities Should Stress Security and be Durable Against Vandalism.

Like almost every park system in the nation, Bristol's parks and public spaces do suffer from a certain degree of vandalism. This concern must be worked in the design of all recreational facilities. Certain types of facilities such as basketball courts and playing fields that are more durable might be emphasized.

Parkland should be as visible as possible from the street to allow surveillance by police and residents. Tall deciduous trees should be used in place of types of landscaping that would obstruct views of the park.

- Carefully Design Any New Recreation Facilities or Parks to Minimize the Amount of Maintenance Needed.

One major cost in maintaining parks is grass mowing. Parks should be designed so that they can be efficiently maintained using mechanized methods that require fewer workers and hours. The Borough or another organization should be committed to funding adequate maintenance before a project is undertaken.

GOAL: TO IMPROVE PUBLIC ACCESS ALONG THE DELAWARE RIVER

- The Strategy for the Bristol Riverfront Developed by the National Park Service and the Citizens Advisory Committee Should be Implemented.

Recommendations for this area are discussed under The Plan for the Riverfront/Lions Park.

- Make Better Use of Small Public Lands Along the Delaware River by New Management Techniques.

Many small publicly-owned lands exist along the Delaware. This includes parcels at the ends of Mulberry Street, Walnut Street, Lafayette Street, Bristol Street and the access road to the Anchor Yacht Club. These parcels are too small for intensive recreational development. At the same time, it is desirable that public access to the Delaware River be maintained and expanded if possible.

One alternative is to seek creative ways of managing these lands. The Borough might enter into short-term leases to turn over each parcel to a responsible neighborhood group or organization. The lease would have to be renewed every year so that if a tract was not properly managed, the Borough could regain full control. The lessee would promise to maintain the land in open space and allow access by any responsible individual or group. However, the lessee would have certain property rights to order off anyone who was misusing the land.

This management technique would stress the natural interest of adjacent and nearby landowners in seeing that their neighborhood is properly cared for. At the same time, the land would remain in public ownership. Therefore, if funds allow, sometime in the future, the lands could be developed for facilities such as boat ramps or fishing piers, or could be part of a walkway system along the entire Delaware River.

- Small Public Lots on the Delaware River Might be Developed Into Overlook Parks.

These parks could include simple designs with steps leading down the hill to a seating area. Each parcel might be graded so that the entire piece of land is easily visible from the street. These parks could serve as pleasant stopping points for persons touring the historic district. Also, these parks would give nearby residents better access to the riverfront. The design and maintenance of these parks might be overseen by community groups. Valid concerns of adjacent residents should be a substantial concern in the design of these areas.

- Encourage Purex to Formally Reserve Land Immediately Along the Delaware for Future Dedication as Public Parkland.

As is discussed in The Plan for the Old Shipyard Area, Purex Inc. is considering improving its present facilities. This represents a major investment in Bristol bringing more jobs and tax revenue. This also represents an opportunity to provide for increased public access to the Delaware River.

The desire is for Purex Inc. to agree to not construct new buildings or facilities within a reasonable setback of the Delaware River. This land might be informally or legally reserved for future dedication to the Borough for public open space. In the future, whenever funds are available to develop a more complete walkway system along the Delaware River, the land might then be turned over to the Borough. Until such time, the land could remain under the control of the Purex Company. Whenever Purex would dedicate an easement or title on the land, they could benefit from a Federal income tax deduction and a slight reduction in the local property tax assessment.

It might not be reasonable to expect Purex to dedicate the entire lands along the River. This is especially true if Purex would require access by barge. However, the Borough should seek to reserve as much river frontage as is reasonable. Any concerns that Purex might have about security would have to be reasonably addressed.

- Promote Expansion of the Riverfront Walkway Along the Grundy Foundation Land Along Radcliffe Street.

The Grundy Foundation's highly scenic park along the Delaware River includes the Grundy Library and Museum. The park is very well-landscaped. This Plan encourages the continued expansion of the bulkheading and river walkway, especially to the rear of the Spring House, acquired by the Foundation.

The goal would be, over the very long-term, to work towards a riverfront walkway stretching along the entire Delaware River of Bristol through voluntary sale and donations of easements across private property. The mandatory dedication of easements along the riverfront might be considered as a possible requirement for approval of a major new development project. This Plan does not encourage involuntary condemnation. Barring unforeseen circumstances, buildings and yards along Radcliffe Street should remain in private ownership unless the owners decide otherwise.

- A Solution is Needed to Keep Debris Clear of the Mouth of Adams Hollow Creek.

Where Adams Hollow Creek meets the Delaware River, debris regularly accumulates. Area residents and Borough officials should study the situation to understand the cause of the problem, develop a solution that will keep the area clean and possibly design improvements to make the area usable for activities such as fishing.

A partial solution might be regular clean-up days by neighbors, with the assistance of Borough equipment. Another idea might be some system large-holed screens that would collect debris. These screens would be designed so that they could be lifted out easily and the debris removed.

## THE PLAN FOR TRANSPORTATION

GOAL: TO ENSURE A SAFE AND EFFICIENT TRANSPORTATION NETWORK, INCLUDING RAIL, TRUCK, AUTO, MASS TRANSIT, BICYCLE AND PEDESTRIAN TRAVEL

- Seek Improvements to Hazardous and Congested Intersections and Stretches of Road.

Hazardous intersections are identified on the Transportation Conditions Map. Most of the hazards involve State-owned roads.

Many confusing intersections could be made safer simply by improved signage. For example, at the intersection of Old Route 13 and Mill Street, vehicles should be made to stop further back from the intersection to allow room for vehicles to turn. A sign should warn traffic approaching from Bath Street that there is a traffic signal at the crest of the hill. The existing traffic signal facing traffic coming from Bath Street should be moved to a more visible location.

The intersection of Bath Road and Otter Street is another place where more clear signage could avoid accidents. Medians might also be placed in the intersection to guide traffic.

- Examine the Sight Distances of Intersections to Consider Whether Parking Should be Eliminated in Certain Areas to Provide Adequate Visibility.

The sight distances needed for a stretch of road are determined by the average speed of traffic.

- Work Towards Providing Sufficient Vehicular Parking That is Convenient to Each Part of the Borough, Especially Residential Neighborhoods and the Mill Street Business District.

The availability of convenient parking is a concern in many of the more densely developed areas of Bristol. Many residents presently use the unused right-of-way of the rail spur for parking. Limited parking is one of the major reasons why the Borough needs to very carefully control conversions of buildings into greater numbers of dwellings.

Portions of the rail spur right-of-way should be developed into neighborhood parking areas where it adjoins densely developed residential neighborhoods that need additional parking. Additional parking to serve the Mill Street Business District should be developed on lots fronting on Market Street.

- Limit Through Traffic by Heavy Trucks.

Through traffic of heavy trucks should be prohibited on streets that are primarily residential whenever an acceptable alternative route exists. Heavy trucks should especially be prohibited on Historic Radcliffe Street to the west of the Mill Run Creek bridge. This is a State road, requiring cooperation with PennDOT. Truck traffic should be directed to roads such as Green Lane Road, Route 13, Beaver Street, Old Route 13 and Radcliffe Street between Mill Run Creek and Green Lane Road. Truck routes should be very clearly marked by signs to let truck drivers know of the legal restrictions and to help them avoid railroad bridges with low underclearances. Once regulations are enacted restricting truck traffic, it will be a major responsibility of the Bristol Police Department to enforce these regulations.

- Improve the Movement of Traffic Along Route 13.

This will be discussed under The Plan for the Golf Ranch/Route 13 Corridor.

- Ensure Safe Pedestrian Travel Throughout the Borough.

Walking and bicycling provide healthful exercise, are forms of active recreation and can reduce auto traffic. Three major pedestrian hazard areas within Bristol are:

- Route 13 in the area of Second Avenue - School children who live on the north side of Route 13 presently must cross the four lanes of Route 13 on their way to and from school everyday. A crossing guard is in the area, but cannot easily stop the high-speed traffic. It is recommended that a flashing "School Crossing - 15 mph" sign be installed in this area, to be activated at the appropriate times by the crossing guard. A median should be placed in the center of Route 13 that would be suitable for pedestrians to stand on. This would make it possible for pedestrians to cross only two lanes of traffic at a time. This pedestrian crossing is not only a problem with children travelling to school, but also with children crossing from their homes on the south side of Route 13 to Silver Lake Park.
- Radcliffe Street at Market Street - A concern here is that vehicles travelling on Mill Street may not see pedestrians crossing Radcliffe Street in front of the Bristol Theater because of the turn in the road. A stop sign could be considered on Mill Street where it turns onto Radcliffe Street.
- The AMTRAK Railroad Tracks - AMTRAK trains travel at very high speeds along the elevated tracks. Because of the speed of the trains, it often is not easy to hear them approaching. There have been several tragedies as a result of people trying to cross these tracks to make shortcuts. This Plan urges that AMTRAK continue to construct high fencing along the entire length of the railroad.

- Ensure Safe Bicycle Travel Throughout the Borough.

Roads that have wide and smooth shoulders might be designated as bike routes. Bicycle racks should be provided at major activity and employment centers.

- Develop a Complete System of Pedestrian and Bicycle Trails for Travel and Recreation.

This is discussed under The Plan for Recreation.

- Encourage Major Employers to Stagger Their Work Shifts to Spread Out Traffic Over a Longer Period of Time.

Congestion on streets and intersections is mainly a problem during morning and afternoon rush hours when major industries in the area start and end work. Congestion in the Route 13/413 area causes some traffic to seek alternative routes using Bath, Beaver and Otter Streets and Old Route 13. The Route 13/413 area west of the Borough clearly needs improvements. Also, it may be possible for major area employers to spread the beginning and ending of work shifts over a longer period of time to reduce the worst periods of congestion.

- Improvements Are Needed to the Route 413/Old Route 13 Area West of Bristol Borough.

This area is not discussed in detail because it lies in Bristol Township. However, it is clearly in the Borough's best interests to join with Bristol Township to urge its' improvement.

- Proposed State and Federal Highway Improvements.

Originally, a new I-895 was proposed to connect I-95 with Burlington, replacing the Burlington-Bristol Bridge. An I-95 spur route was also supposed to connect I-95 with the Route 13 interchange of the Pennsylvania Turnpike. Both of these highways are no longer being considered. This leaves Routes 413 and 13 with the responsibilities to carry traffic from the Burlington-Bristol Bridge and the Turnpike to I-95.

There are three (3) major highway construction projects presently proposed in the Bristol area:

- A ramp is to be constructed from southbound I-95 to Route 413.
- Route 413 is proposed to be widened from I-95 to Route 13.
- An interchange is proposed between the Pennsylvania Turnpike and I-95.

- Work With PennDOT, Bucks County Planning Commission and the Delaware Valley Regional Planning Commission to Obtain Funding for Major Improvements Needed in the Area.

Projects are considered for funding based upon detailed traffic studies of the problems and costs of a proposed solution. In order for a project to be considered for funding, it may be necessary for the Borough and Bristol Township to together hire a professional traffic engineering firm to complete this type of traffic study. PennDOT no longer has the resources to regularly conduct detailed traffic studies. Therefore, improvements are often dependent on the initiative of a community.

- Require Needed Transportation Improvements to be Completed for the Development of the Golf Ranch Tract.

As part of the development of the Golf Ranch, a jughandle and a traffic signal will be required to provide access from Route 13. A signal will probably also be used to provide access from Route 413. Access should also be available from Bath Road, to take traffic off of Route 413. Properly designed acceleration and deceleration lanes and protected left-turn lanes should also be required.

- Consider Use of the Transportation Partnership Act to Fund Transportation Improvements.

The Transportation Partnership Act is a State law passed in 1985 that gives municipalities the authority to levy special taxes or fees on existing or new development to pay for improvements to roads, public transit facilities or sidewalks. Consideration should be given to this legislation as a source of revenue for future transportation improvements.

- Work With PennDOT to Improve Road Signage Throughout the Area.

The Bristol area can be confusing to a visitor. Existing highway signs are confusing and inadequate. Bristol should work to coordinate its sign program with any new signs that PennDOT is willing to install.

- Promote the Development of a Public Road in the Abandoned Railroad Right-of-Way Between Otter Street and Old Route 13.

Certain homes, garages and businesses in the West Ward have their primary access onto an abandoned railroad right-of-way. This right-of-way is privately owned and could be closed to these users. Reasonable efforts should be made to provide a public right-of-way into this area.



- Support the Continuation of Rail Service to the Purex Plant.

An existing rail line connects the rail spur route with the Purex complex. This rail service is important to the continued operation and possible expansion of this facility. The Borough should seek to ensure that CONRAIL or its successor continue service on this track and properly maintain it.

- Continue to Pursue Acquisition of the Railroad Spur Right-of-Way.

The spur railroad track that passes through the middle of Bristol should be acquired. This spur route mainly serves the Rohm and Haas plant. Concern has been expressed over the transportation of hazardous chemicals over this track. This land is proposed for use for housing, recreation and parking as discussed under The Plans for the Areas of Bristol.

- Support the Extension of Existing Public Bus Routes to Major Employment and Activity Centers.

Public transportation provides many important benefits. Some persons, including young teenagers, some senior citizens and the handicapped, are not able to drive. Other persons are not able to afford cars. Still others prefer to ride a bus. Also, bus travel helps to save energy and reduce air pollution.

Residents should be made more aware of the two major bus routes that travel through Bristol. Residents should also provide input to SEPTA on destinations they would like to travel to by bus.

As of 1986, major reductions in Federal public transportation funding are expected. Borough residents should work to see that existing needed bus service to Bristol is maintained.

- Support the Use of a County-wide Paratransit System.

Flexible subsidized door-to-door transportation by vans can be an efficient way of providing transportation service, especially to the handicapped. As of 1986, the continuation of this system administered by Bucks County was in uncertain.

- Promote Increased Ridership on the Commuter Train System.

Using the Bristol train station, area residents can easily travel to Philadelphia, Trenton and many other stations in the Philadelphia region. Residents throughout the area should be made increasingly aware of the service that is available. Signs should direct the way to the train station from Route 13.

The train station and lot are discussed under The Plan for the Old Mill Area.

- Consider Alternative Ways of Providing Access to Bristol Borough School District Lands Along Route 13.

Although not within the Borough of Bristol, the development of this land is important to the Borough because it is owned by the Bristol School District.

- Promote Improvements to the Entrance of the Green Lane Industrial Area From Green Lane Road and to Access Throughout the Industrial Area.

These two objectives listed above are under The Plan for the Keystone/Green Lane Industrial Area.

- Provide for the Development of a New Road to Connect Adams Street With Jefferson Avenue to Promote Better Traffic Flow Throughout the Area.

This is discussed under The Plan for the Harriman Area.

- Promote the Development of a New Road From Trenton Avenue to Serve New Residential Development in the Former Spur Track Right-of-Way.

This is discussed under The Plan for the Harriman Area.

- Clearly Classify Each Street by its Function.

Different types of roads perform different functions. Generally, through traffic and truck traffic should be directed off of local residential streets.

Below, are described the four major types of streets in Bristol. Each road has been classified as one of these four types, as also shown on the Transportation Conditions Map.

Expressways - Provide efficient high-speed connections between cities and between major sections of a metropolitan area. Expressways are designed for high volumes of traffic with access limited to interchanges. Access is not allowed directly from the highway to adjacent properties, therefore allowing a smooth flow of traffic.

Pennsylvania Turnpike (Toll Road)\*  
Interstate 95 (FAI)\*

Arterials - Provide access between major parts of Lower Bucks County, connecting boroughs, towns and major activity centers. Arterials are intended for high traffic volumes at moderate rates of speed. Access to adjacent properties is usually available. However, when volumes become substantial, a divider is usually placed in the median of arterials to prevent left turns. This requires the installation of jughandles to allow turn arounds.

---

\*Designates state roads.

U. S. Route 13 (FAP)\*  
PA. Route 413 (FAS)\*

Collectors - Provide connections between arterial highways and connect residential neighborhoods together. Collectors are intended to carry a moderate volume of traffic, intercepting traffic from local streets and directly serving local activity centers.

Old Route 13\*  
Otter Street  
Bath Road (FAS)\*  
Mill Street\*  
Green Lane Road\*  
Market Street

Pond Street  
Radcliffe Street\*  
Beaver Street  
Jefferson Avenue  
Farragut Avenue  
Wilson Avenue

Local Streets - Provide direct access to property and channel local traffic to collector streets. Local streets are intended for smaller traffic volumes and lower speeds, not for through traffic. Local streets include all those streets not listed above as expressways, arterials or collectors.

---

\*Designates state roads.

STREET CLASSIFICATIONS AND TRAFFIC VOLUMES MAP

TRANSPORTATION CHARACTERISTICS MAP

## THE PLAN FOR HOUSING

GOAL: TO IMPROVE THE PHYSICAL, SOCIAL AND ECONOMIC WELL-BEING AND THE STABILITY OF BRISTOL'S NEIGHBORHOODS

- Encourage a Greater Level of Pride and Involvement in Bristol's Neighborhoods, By Encouraging Neighborhood Organizations.

Pride in a neighborhood can be contagious. One of the best ways to encourage pride and to improve neighborhoods is through neighborhood organizations and block groups. These organizations can sponsor activities such as combined neighborhood clean-up days and block parties. Organizations can also play a major role in Crime Watch programs.

- Prohibit Incompatible Uses from Locating in Residential Areas and Carefully Control Existing Incompatible Uses.

This objective is discussed under the Overall Plan for Land Uses.

- Encourage a Higher Proportion of Home Ownership.

Generally, persons who own their own homes are more likely to be interested in maintaining and improving their homes. Because they have made a substantial financial investment in their home and probably expect to reside in it for a significant length of time, they are also more likely to become involved in improving their neighborhood.

Home ownership can be encouraged by making prospective homeowners aware of the alternative sources for creative and reduced-cost financing. Through workshops, prospective homeowners might also be given advice on how best to accomplish all of the procedures they will need to go through to buy a house.

- Encourage an Even Higher Commitment to Bristol from Mortgage Lenders in the Region.

Many area mortgage lenders have already played a very valuable role in Bristol's revitalization. It is essential that all mortgage lenders be aware of all of the positive trends that are occurring in Bristol. Statistical information can be the best persuasion. Also, an informational tour of neighborhoods of Bristol might be offered to lenders.

- Plan for Four Major Types of Residential Areas.

This Plan provides for four major types of residential areas. In each of these districts, the Borough shall seek to ensure that an appropriate density of housing and compatible types of housing are continued.

- Historical - This area includes the existing Radcliffe Street Historical District. All new construction and exterior alterations will continue to be carefully reviewed to ensure that they are compatible with the historic character of the district.
  - Urban Residential - These areas include sections of neighborhoods that primarily include apartments and rowhouses. This includes the Old Town section, the Jefferson Avenue section, sections of Harriman surrounding the High School and most of the West Ward.
  - Semi-Urban Residential - This includes areas of Bristol that primarily are made up of single-family detached homes and twins. This includes most of Bristol south of Route 13, the side of Harriman nearest to Green Lane Road, areas of Harriman around West Circle and areas around Taylor Street.
  - Multi-Family Residential - This area in the center of Bristol is intended for the historically sensitive adaptive reuse of old historic buildings into apartments. This includes the former Leedon Carpet Mills on Beaver Street and adjacent lands along Canal Street. Open lands in this area have been cleared to provide for similar new construction that would be compatible with its surroundings. Other buildings along Canal Street, including the Grundy Mills, should be considered for conversion to multi-family residential.
- Provide the Level of Services Needed to Ensure Stability of Neighborhoods.

The Borough Government should work with residents and neighborhood organizations to consider what specific types of services need improvement. This includes such matters as trash collection, police surveillance and street lighting. Nuisances that are most likely to discourage investment in a neighborhood should be reduced or eliminated.

- Provide Increased Amounts of Parking in Neighborhoods.

A major problem in many of the existing residential neighborhoods in Bristol is the lack of adequate parking. Detailed analysis of the problem is needed throughout the Borough for each block. In the areas with the most problems and that have available land, neighborhood parking lots should be provided.

The Borough might consider establishing a residential parking authority. This authority would build new parking lots and then charge cars a small monthly fee for a parking permit to cover the costs of constructing and monitoring the lot.

Parking lots should be very carefully designed to be both attractive and safe. Parking lots must not be allowed to become places for undesirable activities. Lighting, directed away from houses, would help make these areas secure. A buffer of grass, low shrubs, low walls or trees should be used between parking lots and public streets, with only one or two auto entrances. This will help maintain the scale and urban fabric of the streets.

A major source of land for parking lots will be the rail spur right-of-way. Much of this land is already used by nearby residents for parking.

- Neighborhood Residents Should be Encouraged to Work Together to Plant Trees, Shrubs and Flowers in Their Neighborhoods.

Many older neighborhoods in the region have been made much more attractive by "greening" program. Greening is when residents place planters with shrubs on their sidewalks, plant trees in their yards and maintain window flower boxes. Vacant lots can be fenced in and leased to individuals for vegetable gardens. Landscaping is a way that a neighborhood can be greatly improved in appearance in a very short period of time. In many urban neighborhoods it has brought people together and increased neighborhood pride.

- Periodically Analyze Trends and Conditions of Housing in Each Neighborhood.

It is important to be aware of housing conditions, both positive and negative, as they change in a neighborhood. A simple "windshield" survey can be conducted annually to note significant changes. If a problem is identified, such as recent properties or the expansion of deteriorating conditions, a more detailed study should be undertaken to define a course of corrective action.

GOAL: TO SEEK A GREATER AMOUNT OF REHABILITATION AND NEW CONSTRUCTION OF HOUSING

- Use Historic Districts to Promote Bristol as a Place to Live and to Encourage Housing Rehabilitation and Pride in Neighborhoods.

This is discussed under The Plan for Historic Preservation and Tourism.



- Encourage Eligible Homeowners to Use Federal Housing Rehabilitation Funds to Improve Their Homes.

Municipalities in Bucks County benefit annually from Community Development Block Grant programs administered by the Bucks County Office of Community Development. A portion of these funds is reserved for a rehabilitation program for low and moderate income persons. Rehabilitation funds are available to homeowners in the County on a first-come first-serve basis.

Information concerning this program should be directed to properties that are identified as being in need of repair.

- Sponsor Workshops to Teach Residents Housing Rehabilitation Techniques.

The Borough School District, the Vocational-Technical School or some other organization should be encouraged to sponsor courses for interested students and for adults in Bristol on housing rehabilitation techniques. A special area of value would be restoration of historic properties.

- Encourage the Development of New Housing in the Former Rail Spur Right-of-Way Adjacent to Monroe and Madison Streets.

This is discussed under The Plan for the Harriman Area.

- Encourage the Development of Well-Designed Multiple-Family Housing in Central Bristol, Including the Conversion of Historic Mill Buildings.

This is discussed under The Plan for the Central Area.

GOAL: TO SEEK HOUSING OF ADEQUATE QUALITY FOR ALL BRISTOL RESIDENTS

- Provide Bristol's "Fair Share" of Affordable Housing.

Bristol has long been committed to providing its "Fair Share" of the housing needed for low and moderate income persons. Many of these persons do require high levels of services while contributing little in revenue. It is essential that all neighboring municipalities also provide for their "Fair Share" of affordable housing and publicly-subsidized units, so that Bristol and other boroughs are not unfairly overburdened.

- Continue to Acquire and Demolish Housing That is Highly Inadequate.

Bristol has used Community Development funds to eliminate houses in very poor condition that had little potential for rehabilitation. This has reduced the density of some neighborhoods and provides needed space for parking or additional yard area for adjoining properties. This program should be continued to eliminate vacant properties that pose a danger to the health and safety of the residents of the neighborhood.

- Enforce Borough Building and Housing Codes to Encourage and Require Needed Repairs of Existing Homes.

Bristol Borough enforces the latest version of the model BOCA building codes. These codes should be used even more aggressively to notify property owners of serious violations and to penalize owners who do not make reasonable efforts to repair the problems. Code enforcement can be especially valuable to require negligent landlords to make needed improvements. Reasonable flexibility is important with low-income homeowners, especially persons with little ability to repair their homes themselves.

GOAL: TO MAINTAIN AN APPROPRIATE POPULATION DENSITY IN ALL NEIGHBORHOODS

- Carefully Regulate the Conversion of Buildings Into Additional Numbers of Dwellings.

Conversions of single family houses into multiple dwelling units should be very carefully controlled by zoning law.

- Investigate the Feasibility of Using Publicly Funded Programs to Encourage Decreases in the Numbers of Dwelling Units in Buildings.

It may be possible to provide incentives to owners of multiple dwelling buildings in neighborhoods with inappropriate densities to convert their buildings to a fewer number of units.

- Actively Watch for Possible Illegal Conversions of Houses Into Apartments.

Strict regulations on conversions of houses will have little effect if property owners avoid applying to the Borough for permission. Residents throughout the Borough should be urged to report possible illegal conversions to the Borough. Philadelphia Electric Company might be urged to report all requests for additional electric service to the Borough.

## THE PLAN FOR ECONOMIC DEVELOPMENT

GOAL: IN ORDER TO INCREASE THE TAX BASE OF THE BOROUGH AND TO PROVIDE GOOD EMPLOYMENT OPPORTUNITIES TO BRISTOL RESIDENTS, ENCOURAGE THE ECONOMIC DEVELOPMENT OF BRISTOL AND SURROUNDING AREAS

- Work to Help Existing Employers Remain in Bristol and to Expand.

Too often, communities place too much emphasis in industrial development programs that seek to attract major industries from outside of a community. The need to retain existing employers is often ignored until it becomes too late.

It is important that Borough officials have regular and open communication with all of the Borough's major existing employers. These companies must realize the value that Bristol places on their contributions to the community and that the Borough stands ready to make all reasonable attempts to help them grow and to help them solve any problems. For example, an industry may be having problems with vandalism or traffic or storm water flooding that the Borough could assist them with. The Borough government might be made aware that a particular type of local tax was a major disincentive for a certain company to expand within Bristol.

Also, Borough officials might be able to provide valuable influence on a company's behalf through their contacts with officials of the County, State or Federal government. The Borough should consider adopting an "Early Warning System" questionnaire to be mailed out annually to industries and businesses. This questionnaire establishes regular means of communications that can help communities identify potential problems so that assistance can be provided.

- Provide Room for Growth by Major Employers.

This Plan intentionally provides for space around each of the major employers in Bristol for any future expansion. Also, the Plan seeks to avoid allowing uses that might conflict with industry from locating beside them. This includes homes.

- Assist Entrepreneurs in Developing New Businesses.

Small businesses provide a large proportion of jobs within Bristol and nationally have provided a very substantial proportion of total growth in jobs. However, many small businesses in the U. S. fail within one or two years of being established. Generally, they do not fail because of lack of effort by the owners, but because of a lack of financing to overcome slow periods and because they are not knowledgeable enough in all the business skills.

Financing problems can be partially solved through use of government loan and loan guarantee programs, such as those of the Small Business Administration (SBA). Area lending institutions might be encouraged to operate a low-interest revolving loan fund committed to businesses in Bristol. Also, banks might be willing to provide loan programs specifically for minority business persons.

- Sponsor Workshops to Improve the Business Skills of Small Business Persons.

Many business persons who are just starting a business need greater understanding of important business skills. These include accounting, marketing and preventing shoplifting.

These workshops might be sponsored jointly by the SBA, the Pennsylvania Department of Commerce, the business programs of area colleges, the Bristol School District and the Mill Street Business Association. Also, many colleges and universities offer programs to provide free technical advice to business persons by professors and advanced students in business.

- Consider Promoting the Establishment of "Incubator" Centers to Help New Small Industries, Services and Stores Become Established.

Incubator centers are places where new, small businesses are given the support they need until they become firmly established. Certain services such as secretarial, photocopying, receptionist, custodial, security and even temporary labor can be shared, with each tenant of a building charged for whatever services they used.

For example, an older industrial building might be rehabilitated to provide a wide range of spaces that could be leased. Certain types of heavy equipment might be rented by the owners of the building. In an incubator office building, a temporary labor pool might be maintained so that each tenant could call in pre-screened employees as they were needed.

This same concept could also work for retail uses. An older building could be rehabilitated to provide space for several small shops, mixing the benefits of an indoor shopping center and a flea market. Some of the stores might be open only during summer months or only on the weekends and evenings. This could allow people to run stores as a second job. This concept would be especially appealing to craftspersons and others who could not afford high overhead costs. The stores could together afford to advertise. As a business attracted regular customers and became more financially secure and the owner developed greater business skills, the business might be able to move into its own building.

The overall intent is to provide for an environment that will help new businesses become established by reducing their start-up costs and providing important support services.

- Work to Attract New Businesses to Bristol.

Attracting major industries to a community is a very competitive situation. Many states, regions and counties have extremely well-organized and well-financed industrial promotion programs that may be tough to compete with directly. Therefore, Bristol may find it most effective to work through major promotional activities that are already underway. This includes efforts by the Bucks County Industrial Development Corporation, the Lower Bucks Chamber of Commerce, Philadelphia Electric Company and the Commonwealth of Pennsylvania Department of Commerce.

Promotional efforts by Bristol independent of these programs might be best directed towards attracting smaller industries and businesses to specific buildings or sites available for development.

- Consider Publishing a Brochure and Information Packet, Specifically to Attract Small Businesses and Industries to Bristol.

The Borough might consider producing a brochure that would stress introducing business people of the Philadelphia region to Bristol, to let them know the positive things that are occurring. The brochure could serve to highlight major available business opportunities. The intent should be to catch people's interest so they will want to take a closer look. Detailed information sheets could be attached to the brochure and be periodically updated without having to replace the entire brochure.

- Promote Economic Development Throughout the Region, Within a Reasonable Commuting Distance for Bristol Residents.

Many Bristol residents already commute to jobs outside of the Borough. To most residents, the job opportunities available within a thirty minute drive of their homes are more important than the jobs available within Bristol. Therefore, it is important that Bristol support economic growth in its surrounding areas.

- Periodically Review the Advantages and Disadvantages of Bristol as a Business Location to Stress Action Where It Will Do the Most Good.

The Bristol business community should periodically review Bristol's strengths and weaknesses in attracting and retaining business. Emphasis should be placed on the strengths that can be best built upon and the weaknesses that can most easily be reduced.

At this same time, all of the different taxes collected by the Borough and School District should be reviewed. The intent is to consider whether any specific types of taxes are acting as major disincentives to different types of businesses.

- Investigate the Potential Costs and Benefits of Various Types of Tax Deferrals and Abatements by the Borough and the School District.

A great many types of tax incentives could be offered to businesses, within the bounds of State laws. It is essential that any incentives be very carefully chosen so that they will bring much greater benefits than they will cost in lost taxes.

These incentives might include allowing certain types of improvements to occur without causing an increase in the real estate assessment for three years. Tax rates might be reduced for property within a certain area of the Borough to direct growth there. Some types of back taxes might not have to be paid until three years after construction occurs to spread out the high initial costs of a project.

- Encourage the Growth of the Mill Street Business Area and Other Commercial Areas.

This is discussed under The Plan for the Mill Street Business Area and other Plans for Areas of Bristol.

- Encourage Business Associations Covering the Farragut St. Area, the Route 13 Corridor, the Otter Street Area and the Old Route 13 Area.

Business associations can be valuable in providing mutual support to business persons working to resolve problems of areas and promoting the businesses of an area together.

- Improve the Attractiveness to Businesses and Customers of Commercial Areas in Bristol.

The physical attractiveness of an area affects the types and numbers of businesses and customers that are attracted. Also, features such as convenient parking and ease of getting in and out of a business parking lot affect the success of an area. The different Plans for the Areas of Bristol discuss proposed improvements.

- Encourage Businesses That Are Inappropriate for Residential Areas to Move to Commercial or Industrial Areas.

This is discussed under The Plan for Housing.

• Plan for Five Types of Commercial and Business Areas.

- Central Commercial - This includes the area around Mill Street and related areas along Otter Street and Old Route 13. Special attention will be paid to promoting uses that will complement the historic character of the area.
- Highway Commercial - This area allows many types of commercial uses, including those directed primarily towards the automobile rather than the pedestrian. This includes the shopping center portion of the Golf Ranch tract and parcels along Route 13.
- Neighborhood Commercial - These areas allow commercial uses that will be compatible with the surrounding residential areas. These include areas along Farragut Avenue and Beaver Street near Route 13.
- Office - This area encourages business and medical offices and public and semi-public uses. The Plan shows this area for the northeast corner of Mill and Radcliffe Streets and for lands adjacent to Lower Bucks Hospital Center.
- Multi-Family Residential - This includes areas in central Bristol, including the former Leedon Carpet Mill, the Grundy Mills and adjacent land along the Delaware Canal.

This area will encourage multi-family housing, with specific types of business uses to be allowed on the first floor. These uses might include small stores and services to serve the neighborhood and business and medical offices.

• Plan for Two Types of Industrial Areas.

- Planned Light Industrial/Office - This area allows well-designed and planned offices and light industries in a campus-like environment. This area includes the interior portions of the Golf Ranch tract.
- General Industrial - This area allows light and heavy industries; these industries will be controlled by a reasonable set of performance standards to avoid nuisances to adjacent land. These areas include Purex, Keystone Lighting areas, areas west of Green Lane Road, between the AMTRAK rail lines and the Delaware Canal, areas along Old Route 13 and Rohm and Haas and the Howell Street Industrial Area.

GOAL: TO AGGRESSIVELY SEEK THE BEST USE OF LARGE AREAS OF UNDEVELOPED AND UNDERUSED LAND AND AVAILABLE BUILDINGS THAT ARE APPROPRIATE FOR MAJOR EMPLOYERS

- Aggressively Seek Available Federal and State Grants, Loans, Bonds and Loan Guarantees to Assist in Funding the Improvement of Land and the Construction of Buildings for Businesses.

This is discussed under the section of this Plan entitled "Putting the Plan Into Action."

- Realizing That the Amount of Undeveloped Land in Bristol is Limited, Be Reasonably Selective in the Type of Development That is Allowed.

It is important to remain aware of the market that can be realistically expected to exist for vacant land in Bristol. The goal is to attract the highest amount of tax revenue and well-paying jobs on each acre of undeveloped industrial land. Therefore, for example, if a manufacturing plant can be attracted to a site, a wholesale warehouse should be discouraged. At the same time, the Borough would want to accept a warehouse if a more desirable type of industry could not be attracted.

Development should be encouraged that will attract more development that is desirable. Unattractive or nuisance-creating uses should be avoided as it will discourage more desirable development.

- Encourage the Offering of Flexible Industrial and Office Space.

Often, an industry, wholesaler or other business will need a small amount of space for a relatively short period of time. Also, a user may need to quickly expand or contract his space needs. In these situations, a user would not want to buy or lease an entire large building.

Therefore, the Borough should allow buildings in industrial areas to include several major users.

- Promote the Expansion by Purex, Inc. of Its Industrial Complex.

This is discussed under The Plan for the Old Shipyard Area.

- Promote the Improvement of Land, Roads, Buildings and the Construction of New Industries in the Industrial Area Off of Green Lane Road Alongside the Delaware Canal, Including Land Owned by Bristol Borough School District in Bristol Township.

This is discussed under The Plan for the Keystone/Green Lane Industrial Area.



- Promote the Expansion of Rohm and Haas Onto Suitable Land Within the Borough That is Not Within the 100-Year Floodway.

This is discussed under The Plan for the Rohm and Haas Area.

- Promote the Development of a Shopping Center, Light Industries and Offices on the Golf Ranch Tract.

This is discussed under The Plan for the Golf Ranch/Route 13 Corridor.

- Promote the Development of the Former Delaware Valley Hospital Building Into a Personal Care Center for Senior Citizens or Other Appropriate Health Care Facility.

This is discussed under The Plan for the Harriman Area.

- Promote the Development of Industry in Appropriate Areas of The West Ward, Along Otter Street.

This is discussed under The Plan for the West Side.

- Promote the Development of the Bristol Railroad Station Into an Appropriate Use and Consider Encouraging Office Development on a Portion of the Adjacent Parking Lot.

This is discussed under The Plan for the Central Area.

GOAL: TO ASSIST BRISTOL RESIDENTS IN IMPROVING THEIR JOB SKILLS

- Work With Job Training Organizations to Ensure Programs Meet the Needs of Bristol Residents.

Several public agencies provide free or subsidized job training and counseling to disadvantaged persons. These agencies include the Private Industry Council (PIC) of Bucks County, the Bucks County Office of Employment and Training and the Levittown Office of the Pennsylvania Job Service. Input should be provided to these agencies on the needs of Bristol residents. For example, PIC might be able to provide training for construction jobs to restore historic buildings. Also, residents should be made more aware of the services that are available.

- Make Area Employers More Aware of the Strong Financial Incentives Available for Hiring Disadvantaged Workers.

A wide variety of Federal and State programs provide a range of tax benefits and subsidies to employers who hire and train disadvantaged persons. Often, all of the paper work is done by the public agencies.

- The Borough School District Should Stress English Language Programs and Instilling Good Job Habits.

A serious problem for many Bristol residents, especially Hispanics in obtaining good jobs, is a language barrier. The School District should take the lead responsibility in working towards the goal of every student and interested adult being able to speak English fluently.

- Job Training Programs Should Stress Good Work Habits.

Studies across the nation have shown that many persons unemployed for long periods of time had been able to obtain low-paying jobs but then quit or were fired. This illustrates the importance of stressing good work habits and attitudes. Many employers have reported in major national surveys that good work habits are much more important in many types of jobs than any particular skills.

- Work to Reduce Social Problems That Make It Difficult for Some Persons to Advance Themselves and Their Families.

These efforts are the roles of numerous churches, community organizations, County agencies and State agencies.

- Promote Expanded Mass Transit to Major Employment Centers to Help Open Wider Job Opportunities to Residents.

This is discussed under The Plan for Transportation.

GOAL: PROMOTE TOURISM IN BRISTOL

- Stress Bristol's Historic Role as a Transportation Center as an Overall Theme for Tourism; Coordinate These Efforts With Promotion of the Bristol Marsh Nature Preserve by the Nature Conservancy.

As discussed under "A Short History of Bristol," Bristol has for almost three hundred years been a major center for different types of transportation. This includes a pre-colonial ferry, early steamboats, early roads, stagecoaches, the Delaware Canal, the Pennsylvania Railroad, the Harriman shipyard, a seaplane factory, an airplane factory and more recently, the Pennsylvania Turnpike and Interstate 95.

- A Visitor's Center Might Initially be Established in Donated Space Within a Business.

Locating a visitor's center within a business, such as a gift shop on Mill Street, would offer an attraction to bring more people to a business in return for free space. As the visitor's center grew, it then might be appropriate to move it to a separate location, such as the Water Department Shed.

- Develop the Water Department Shed Into a Museum, Visitor's Center and Marsh Nature Center Headquarters Building.

This red brick building with a red tile roof stands on Canal's End Road at Maple Beach Road. It could be renovated into a museum commemorating Bristol's history and as a greeting and information center for tourists. It also could serve as a headquarters building and nature study center for the adjacent Otter Creek Nature Preserve. The museum could relate to the adjacent canal bed of the Delaware Canal. Vacant land adjacent to the canal bed could be available for parking by cars and tour buses.

- An Alternative Museum Site: the First Floor of the Spring House.

The Spring House is an old house on the riverfront on Radcliffe Street that is owned by the Grundy Foundation. It is located adjacent to the Grundy Foundation's museum/offices/library/park complex. The Grundy Foundation might wish to consider establishing a historical museum on the first floor of this house. The rest of the house could still be rented out to responsible tenants. As the museum becomes more successful and established, the Foundation could then consider whether to expand the museum to larger proportions of the house.

- A Museum Might Stress Loans of Materials from Bristol Residents.

The purchase of materials for a museum can become very expensive. A museum might instead stress loans of interesting materials from Bristol residents. This would also provide a more interesting turnover of displays. Also, it would be expected that donations to the museum would be encouraged by Federal income tax benefits to donors. Too many museums fail to attract local residents. Therefore, the museum should be strongly promoted around Bristol.

While a site is being developed for a museum, the acquisition of materials could already begin. These materials could be displayed in the lobbies of major buildings throughout Bristol to generate interest in the museum.

- A Bristol Museum Might Emphasize Bristol's Important Roles in Transportation.

Certain transportation industry associations may be willing to provide some support or at least lend exhibits for displays. Museums, such as the Philadelphia Maritime Museum, might also be willing to lend exhibits.

- Stress Many Types of Special Events and Promotions to Bring People to Bristol.

This is discussed under The Plan for the Riverfront Park.

- Tourist and Historic Attractions Should Seek to Interpret the Significance of Bristol's Rich History and Tie Into Broad Social and Economic Changes.

Bristol would be less attractive to outside tourists if it just displays old pictures of the town rather than if it tries to explain its importance. Many of the factors that shaped Bristol were part of much larger social and economic movements. The goal is to show how times in Bristol's history illustrate why things are the way they are today throughout the region.

- General Maps at Key Locations Would Help Get Visitor's Oriented by Displaying Major Attractions.

Orientation maps and signs would serve to help visitors find their way to the points of interest in Bristol.

- Brochures Might be Published to Describe Walking Tours of Bristol.

This would provide interesting information without the need for a guide. Any type of brochure might be paid for by a few carefully selected small advertisements by local businesses.

- Cooperate Closely With Tourism Agencies and Bus Tour Companies.

It is unlikely that Bristol will have a large budget available for tourist promotion. Therefore, it is important that Bristol cooperate with agencies such as the Bucks County Tourism and Historical Commission, the Pennsylvania Department of Commerce Division of Tourism Development and other tourist promotion areas for the Philadelphia region. Also, Bristol might provide tourism information to planners from bus tour companies and travel agents, then offer them guided tours of Bristol's offerings.

## THE PLAN FOR HISTORIC PRESERVATION

GOAL: TO RESPECT, PRESERVE AND ENHANCE BRISTOL'S SPECIAL HISTORIC CHARACTER AND BUILDINGS

- To Strongly Encourage the Identification, Preservation and Restoration of Historic and Architecturally Significant Buildings.

Bristol possesses an architectural richness, including a wide variety of architectural styles. A concentration of great buildings is along Radcliffe Street but other treasures are throughout Bristol; they should be identified by historic resource surveys. The following is a list of the historic sites and buildings presently recognized in Bristol:

- Delaware Canal - The portion of the Canal from behind Keystone Lighting to beyond Green Lane Road is listed on the National Register of Historic Places. This portion of the Canal is part of Theodore Roosevelt State Park. Much of the Canal bed throughout the remainder of the Borough remains mostly intact. Certain locks have been buried behind Buckley Street as a preservation measure.
- Bristol Wharf - This site within Lions Park was used for the historic Burlington-Bristol ferry. Trials of one of the earliest steamboats occurred off of this wharf.
- King George II Inn - Radcliffe Street at Mill Street.
- Jefferson Elementary School - This building has been listed on the National Register of Historic Places.
- Grundy Mill and Clock Tower - Jefferson Street along the Delaware Canal.
- Leedom Carpet Mill - Beaver and Canal Streets.
- Joseph Grundy Museum - Radcliffe Street.
- Mohican Hall - Otter Street. Additions presently hide much of this early 19th Century building.
- Friends Meeting House - Market and Wood Streets. This is the oldest remaining structure in Bristol, completed in 1713.
- Bristol Fire Company Number One - Market and Wood Streets.
- Historic Radcliffe Street - between Mill Street and Adams Hollow Creek. These buildings on this street are now protected by a State-certified Historic Zoning District. Radcliffe Street was part of the original King's Highway to Philadelphia.

- Historic Mill Street - Many of the historic buildings on this street are currently covered by modern facades.
- Water Department Shed - Canal's End Road near Old Route 13.
- Bristol Train Station - Beaver and Prospect Streets.

- Survey and Seek Certification of Three New Historic Districts.

In 1985, an Historical Certification Committee appointed by Borough Council studied the advantages and possible disadvantages of establishing Historic Districts in Bristol that would be listed on the National Register of Historic Places. The Committee recommended that three new historic districts be established:

- "Old Town" - generally includes the area of Bristol that was developed by 1801, including Mill, Radcliffe and Cedar Streets.
- "Mill District" - includes Grundy Mills, Leedom Carpet Mills and related worker housing in the Buckley Street Area.
- "Harriman" includes the old shipyard area built during World War I and the related model community.

Funding for historic certification work in 1985 was granted by the Pennsylvania Historical and Museum Commission and matched by the Grundy Foundation.

- Three Historic Properties Have Already Been Certified.

Radcliffe Street is regulated by a State-certified historic zoning district. The former Jefferson Elementary School has already been placed on the National Register of Historic Places. Also on the National Register is the portion of the Delaware Canal that is State-owned, from behind Keystone Lighting to Green Lane Road.

- State-Certification of Historic Districts Should be Considered In Addition to National Register Status.

State-certified historic districts require local Historical and Architectural Review Boards to review and approve every proposed alteration, demolition or new construction. Approval of changes would not be required within National Register Districts unless the project would be receiving Federal assistance.

- Encourage the Pennsylvania Historical and Museum Commission to Install Additional Historical Markers in Bristol.

The Radcliffe Historical and Cultural Foundation should provide this agency with the information it needs to support additional signs at historic sites in Bristol describing the historical importance of different areas and buildings.

- A Public Awareness Campaign on Historical Districts is Important.

Some proposed historic districts have failed to become established because of badly misinformed opposition by property owners and residents. It is essential that property owners in historic areas be totally aware of the many benefits of historic districts.

- To Use the Preservation of Historic Buildings and the Enhancement of Bristol's Historic Character as a Major Part of a Revitalization Strategy.

The rehabilitation of historic buildings have been extremely influential in the revitalization of many older cities. As of 1986, this investment was largely being driven by excellent Federal income tax benefits for major historic rehabilitation projects. The establishment of certified historic districts in Bristol should help attract major investments to Bristol. Also, increased attention to Bristol's historic character can be expected to attract increased numbers of persons wishing to buy and improve individual homes in Bristol.

- Historic Preservation Will Bring Many Benefits to Bristol.

- Increased civic and neighborhood pride,
- Increased investment in buildings,
- Increased employment from restoration work,
- Increased tax base,
- Increased tourism,
- Increased attractiveness of the Borough,
- Preservation of community symbols,
- Increased outside attention to Bristol, and
- Revitalized neighborhoods.

- Developers Should be Informed of the Many Economic Advantages of Historic Restoration Compared to New Construction.

- Federal tax incentives,
- Often shorter completion time,
- Often lower overall costs per square foot,
- High quality original construction,
- Less need to install new utilities and site improvements, and
- Historic character often commands higher rents.

- Prospective Developers Must be Made Especially Aware of the Federal Income Tax Benefits of Historic Rehabilitation.

As of 1986, a large percentage of the costs of substantial rehabilitation of historic buildings could be credited against an investor's Federal income tax. These benefits are available for buildings individually listed on the National Register of Historic Places or for a building within a National Register or Locally-Certified Historic District if that building contributes to the significance of the district. Also, to be eligible, the rehabilitation must be truly substantial and must meet the Department of the Interior's guidelines for restoration. These benefits are only available for certain types of uses, not including owner-occupied residential. There are complexities to these benefits; therefore, the latest and most complete information should be consulted.

As of 1986, these tax benefits were in danger of being eliminated for future projects. Therefore, it is all the more important that developers take advantage of the benefits while they are still available.

- Developers Should Also be Made Aware of Federal Tax Benefits for Restoring Buildings That Are Not Historically Certified but That Are At Least Twenty Years Old.

As of 1986, Federal tax benefits are available for the substantial rehabilitation of most buildings that are only twenty years old. Higher benefits are available for buildings at least thirty years old.

- Developers Should be Made Aware of Successful Historic Rehabilitation Projects Accomplished in the Area.

The best way to convince developers to risk their money and effort is to prove that a similar project was already successful. Area developers, especially those unfamiliar with historic rehabilitation, might be provided with information on successful projects and then offered a tour of these projects.

- Strongly Encourage the Adaptation of Historic Buildings to Modern Uses While Retaining Their Historic Character.

Historic preservation should encourage the adaptive use of older buildings for businesses and homes. The emphasis of preservation should be to protect the exterior of buildings that are easily visible from public streets. Unless there are large public interior areas, historic preservation is much less concerned about the interior of buildings, which might be completely gutted and rebuilt.



- Promote New Construction in Historic Areas That Are Compatible With Its Surroundings.

New construction should occur that will be compatible with an historic district. It is not essential that new buildings try to look old. Instead, new construction should maintain overall scale, mass and colors that are similar to its surroundings. The major vertical and horizontal lines of adjacent buildings should be continued, especially the roof line. Buildings should be set back the same distance from the street.

- Encourage the Donation of Facade Easements to the Borough or the Radcliffe Historical and Cultural Foundation.

This method grants an organization control over how the facade of a building can be altered, to protect the historic character. The remainder of the building continues to be the property of the original owner. In return for the easement, the donator can receive Federal income tax benefits for a charitable contribution.

- Discourage the Alterations That Would Destroy the Historic Character of a Building.

Efforts should be made to discourage property owners from altering historic buildings in ways that are incompatible with their surroundings. Property owners should be urged to consider historically accurate rehabilitation as an alternative. Experts in historic restoration can provide advice on the costs and techniques of restoration.

- Stabilize Buildings Worthy of Rehabilitation Until They Are Rehabilitated.

Valuable buildings must not be allowed to deteriorate to the point where they are no longer feasible to rehabilitate. Basic maintenance should occur until a suitable reuse can be found. Low interest loans to property owners might make this possible. For example, the roof of an underutilized industrial building might be repaired until a redeveloper can be found. This policy has been used for the Leedom Carpet Mills on Beaver Street. The Grundy Foundation purchased the building, maintained it and marketed it. In 1986, there is serious interest by developers in rehabilitating it into luxury apartments and offices.

- Vacant Buildings and Houses Must be Secured.

If a building becomes vacant, it should immediately be tightly secured, including boarding up windows and doors. This will help preserve a building until it can be rehabilitated.

- The Borough Government Could Consider Giving Itself the Power to Order A Moratorium on the Demolition of an Historic Building.

At times, property owners demolish historic buildings without carefully considering alternatives. Once a great building is demolished at a point in time, it is gone forever to future generations.

The Borough Council can adopt legislation granting itself the power to put a six month hold on the issuance of a demolition permit. This allows time for the property owner to reconsider his/her actions. A new user might be found for the building or a new site found for any new building proposed for the site.

- Valuable Items From Demolished Buildings Should be Salvaged.

Anytime an historic building must be demolished, efforts should be made to salvage any features that could be used in the restoration of other buildings.

- An Historic Design Guide Might be Published to Provide Advice on Ways of Rehabilitating Historic Buildings.

This should be part of a Mill Street Facade Program. A separate effort should be specifically directed towards homeowners which would include recommendations for architectural details and recommended color combinations for painting different types of homes.

- General Standards Should Guide All Alterations in Historic Areas.

Several of these overall standards are listed below:

- Keep the shape of the original roof - especially avoiding flat roofs.
- Avoid materials that are obviously modern - such as aluminum siding. Try to use the same type of materials as were used originally.
- Try to use colors of the period - especially avoiding extremes in color.
- Even if a complete and authentic restoration is not possible, try to at least not damage remaining original features. This includes trim, porch rails and columns.

- Borough Building Codes Should be Examined to Ensure That They Encourage Historic Restoration.

Some communities have established a system to allow waiving certain requirements to allow authentic restoration of buildings. The Borough should consult the U. S. Department of Housing and Urban Development's model building code guidelines for historic rehabilitation.

- Continue to Seek Valuable Advice and Support From Outside Historic Preservation Organizations.

These organizations include the National Trust for Historic Preservation, the Bucks County Conservancy, the National Park Service and the Pennsylvania Historical and Museum Commission. These organizations can not only provide advice and information, but may help sponsor workshops on restoration techniques and provide advice on private businesses and contractors involved in restoration.

Another extremely valuable resource, within Bristol, continues to be the Radcliffe Historical and Cultural Foundation, formally established in 1967. This organization should continue to promote interest in the history of Bristol and to document and celebrate this history through its many activities and special events.

- Develop Pedestrian Trails Along the Delaware Canal Towpath.

This objective is discussed under The Plan for Recreation.

- Preserve the Delaware Canal Bed in Open Space and Seek Partial Restoration of Segments of the Canal.

This objective is discussed under The Plan for Recreation.

- Seek to Identify and Professionally Unearth Valuable Archaeological Sites.

Whenever major excavation is occurring in the older sections of the Borough, efforts should be made to recover any valuable artifacts. These items might then be exhibited in the proposed Bristol Museum.

MAJOR HISTORIC SITES AND PROPOSED HISTORIC  
DISTRICTS MAP

## THE PLAN FOR ENERGY CONSERVATION

GOAL: TO WORK TOWARDS A HIGHER LEVEL OF ENERGY CONSERVATION

The higher costs of energy and the need for national independence for sources of energy have caused a greater need for energy conservation. This Plan acknowledges Bristol's awareness of the need to achieve effective energy conservation. Energy use guidelines and techniques are described which Borough officials, residents, industries and businesses, and developers and builders can use to help conserve energy.

- Make Best Use of Sources for Information and Advice on How to Save Energy, Especially from the Pennsylvania Energy Center.

The Commonwealth of Pennsylvania funds a Pennsylvania Energy Center through the Greater Philadelphia Chamber of Commerce. This Center provides pamphlets, information and advice on ways to conserve energy. Many of their suggestions include methods that would cost nothing or very little. The Energy Center can be contacted at 1-800-HOT-TIPS or 1-545-7558.

This Energy Center also provides free energy surveys in which trained persons visit buildings and recommend specific ways that energy could be saved. These energy surveys are available to local governments, businesses, nonprofit organizations or apartment buildings with more than 4 units. Also, Philadelphia Electric Company provides energy surveys of individual homes and small apartment buildings for a small fee.

- Many Buildings Can Benefit from Energy Audits.

Some buildings, especially large businesses, may need more detailed analysis of the use of energy in their buildings than can be provided in the free energy surveys provided by the Pennsylvania Energy Center. In these cases, a professional energy engineer may be hired to fully analyze ways that energy costs can be reduced. This can provide a detailed statement of exactly how long each improvement would take to pay for itself by reduced energy costs.

WHAT CAN BOROUGH OFFICIALS DO?

- Review Borough Operations for Ways to Save Energy.

With rising operating costs due to inflation, Borough Officials must continuously seek ways to reduce or at least hold the line on the costs of operating government. Energy is one of the ever increasing operating costs because it is required to heat buildings, light streets, operate vehicles and provide many municipal services.

Borough Officials should consider using the following techniques to help conserve energy and reduce operating costs without sacrificing safety:

- Conduct a survey of current energy use (such as an Energy Use Record) by reviewing energy conservation practices and conditions in each building and department. This will show where energy is wasted and identify opportunities to conserve energy.
- Set energy use goals and policies. Department heads should participate in forming these energy conservation goals and policies. The goals must not only be practical, but so must the policies that will help achieve the goals. A goal, for example, of using 10 percent less energy could be achieved through a variety of policies (such as maintaining a maximum temperature of 68° in public buildings).
- Encourage energy conservation practices among employees.
- Monitor energy use. After the energy use survey is completed and after energy conservation policies have been implemented, energy use levels should be periodically monitored to determine if the energy conservation goals are being reached. Based upon this monitoring, energy conservation goals and policies may need to be revised.
- Adjust heating, ventilating, air conditioning and lighting equipment to conserve energy. This is simple yet very cost effective.
- Modify buildings to include proper insulation, glazing, weatherstripping and other improvements to increase energy efficiency. This is also very cost effective.
- Consider using solar systems for auxiliary heating (water heaters, passive heaters) in municipal buildings.
- Consider evaluating current street and other outdoor lighting such as mercury vapor or sodium vapor. Energy consumption savings could range from 10 to 80% while actual amount of lighting could increase anywhere from 31 to 186% of present levels. (Amount of savings vary greatly and will depend on which lighting systems are used and what the future lighting needs of Bristol will be.)
- Consider deactivating selected street lights to reduce lighting costs.
- Use more energy efficient vehicles in the municipal fleet.
- Use gas-saving radial tires on the vehicles in the municipal fleet. Radial ply tires allow better gas mileage because they produce less rolling friction--2 to 5% in city driving and -7% on the open highway. Radials also last longer.
- Use "life-cycle" cost analysis in Borough procurement procedures. This analysis considers the estimated lifetime operating cost of a piece of equipment as part of the total equipment cost. For example, radial tires may have a higher initial cost than conventional tires, but over the life of the tires, radials may save enough in reduced fuel and replacement costs to more than offset the higher initial cost.

- Review Borough Ordinances for Ways to Save Energy.

Borough Officials can use this Comprehensive Plan document, the updated zoning and subdivision regulations and building codes to help make Bristol more energy efficient.

#### Comprehensive Plan

This Comprehensive Plan recognizes the importance of energy conservation. It includes an overall energy conservation goal with specific objectives and it includes this specific energy element as a major component of the Plan. The Comprehensive Plan includes an energy-efficient land use pattern which encourages close-to-home shopping, employment and recreation as well as a transportation system designed to reduce the need for the automobile (one of the least efficient uses of gasoline).

#### Zoning Ordinance

Zoning can help to achieve energy conservation. An energy conscious zoning ordinance provides for a full range of housing types--including higher density residential structures. The types and sizes of housing directly affect the amount of energy consumed for space heating and cooling. The Federal Department of Energy has stated that high-density residential structures (such as apartment buildings) require from 40% to 60% less energy per unit annually than do low-density structures (such as single family homes).

The updated Zoning Ordinance should also recognize that protecting solar access will become more important in the future and that alternative energy sources (such as windmills and methane generation) will likely play an increasing role in the future use of energy by residents. The land use controls of the Borough should encourage the safe and reasonable development and the use of alternative sources of energy.

#### Subdivision Ordinance

Subdivision regulations govern the process by which raw land is converted into developable lots and set standards for site design and required improvements. These regulations can influence energy-conservation land development through their street layout and design standards. When updating the Subdivision Ordinance, Borough Officials should be sensitive to the need for energy-efficient site planning (clustered housing, north-south lot orientations, nonexcessive street widths, etc.). Site plan review procedures should include energy efficiency as a criterion for approval.

## Building Code

The Borough's Building Code regulates new development by setting standards for construction materials and for plumbing and electrical systems. Incorporating energy standards into the building code contributes to energy conscious design of new structures and of existing structures undergoing major renovations. The purpose of these standards in a building code is to minimize a building's heat gain and loss. The code should include adequate insulation standards for walls, ceilings, floors and attics. The BOCA Code, which Bristol enforces, includes provisions for energy-efficient buildings.

- Seek to Increase Public Awareness and Education on Energy Conservation.

Borough Officials should also work toward making residents, property owners, builders and developers more aware of the need for energy conservation in Bristol. The following techniques are examples of what can be used to educate the public about the need for and value of energy conservation:

- Distribute energy conservation brochures, booklets or information packages explaining the importance and value of conserving energy and listing energy conservation techniques.
- Conduct energy seminars for local participation.
- Encourage the purchase of water conservation kits.
- Conduct energy demonstrations to show specific examples of how energy conservation can actually work.
- Encourage residents to take advantage of Federal energy tax credits and advise qualified families of the Federal and State weatherization programs which reduce home heating costs through publicly funded conservation improvements.

## WHAT CAN RESIDENTS DO?

Residents and property owners have a major role to play in conserving energy. Research conducted at Princeton demonstrates that two families living next door to each other, in homes that from a technological and construction standpoint are identically energy efficient, can have energy bills differing by as much as 100%. Clearly, lifestyle and energy consciousness are vital factors in increasing total energy efficiency. The following information and suggestions, if used, can result in both energy conservation and considerable savings to residents.

- Find Ways to Save Energy in Heating, Cooling, Appliances and Driving.

Residents and property owners should consult some of the numerous pamphlets and booklets available on how to save energy. These methods are too numerous to explain within this Plan. Contact the Pennsylvania Energy Center, described earlier in this section.



## WHAT CAN INDUSTRIES AND BUSINESSES DO?

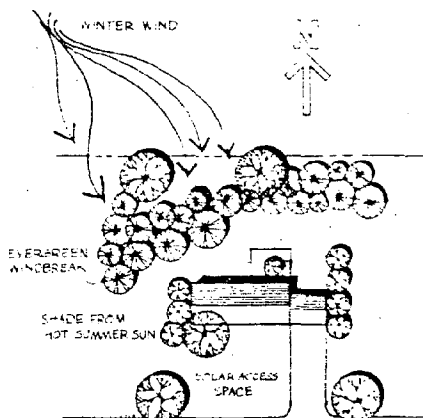
Over 60% of the nation's energy is consumed by industrial and commercial uses. Industrial plants and businesses are encouraged to develop and implement energy conservation programs. Many of the suggested techniques in this Plan can be applied to industry and business.

Conservation measures that could be undertaken by industries and businesses could include energy audits of the building and the operations, energy awareness programs for employees, more efficient use of lighting, lowering of temperature during the heating season and raising it during the air conditioning season. Because the size and nature of industries vary considerably, the potential energy conservation activities will differ from one firm to another.

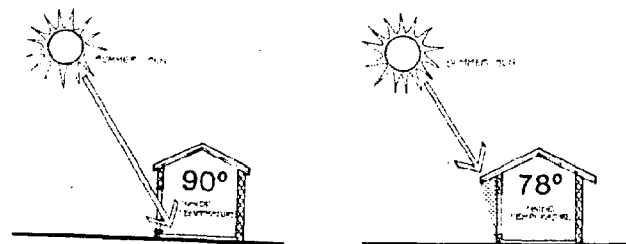
## WHAT CAN DEVELOPERS AND BUILDERS DO?

Developers and builders also share the responsibility of conserving energy. The Borough could require builders to construct energy-efficient buildings. Energy-efficient site planning and landscaping will also contribute toward energy conservation.

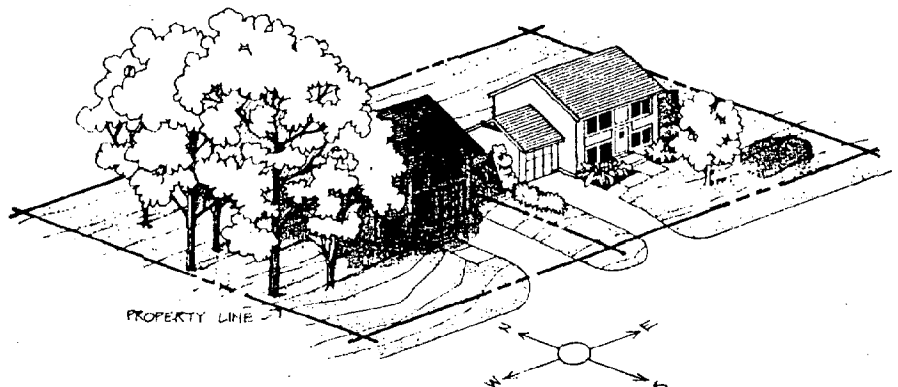
Developers and builders and Borough Officials can encourage more energy-conscious development by applying, where possible, the following principles which are only several of many site planning techniques that will conserve energy.



*Energy-conscious planting should balance needs of all seasons.*



*Flexible siting saved existing grove of trees that shade house from hot afternoon sun.*

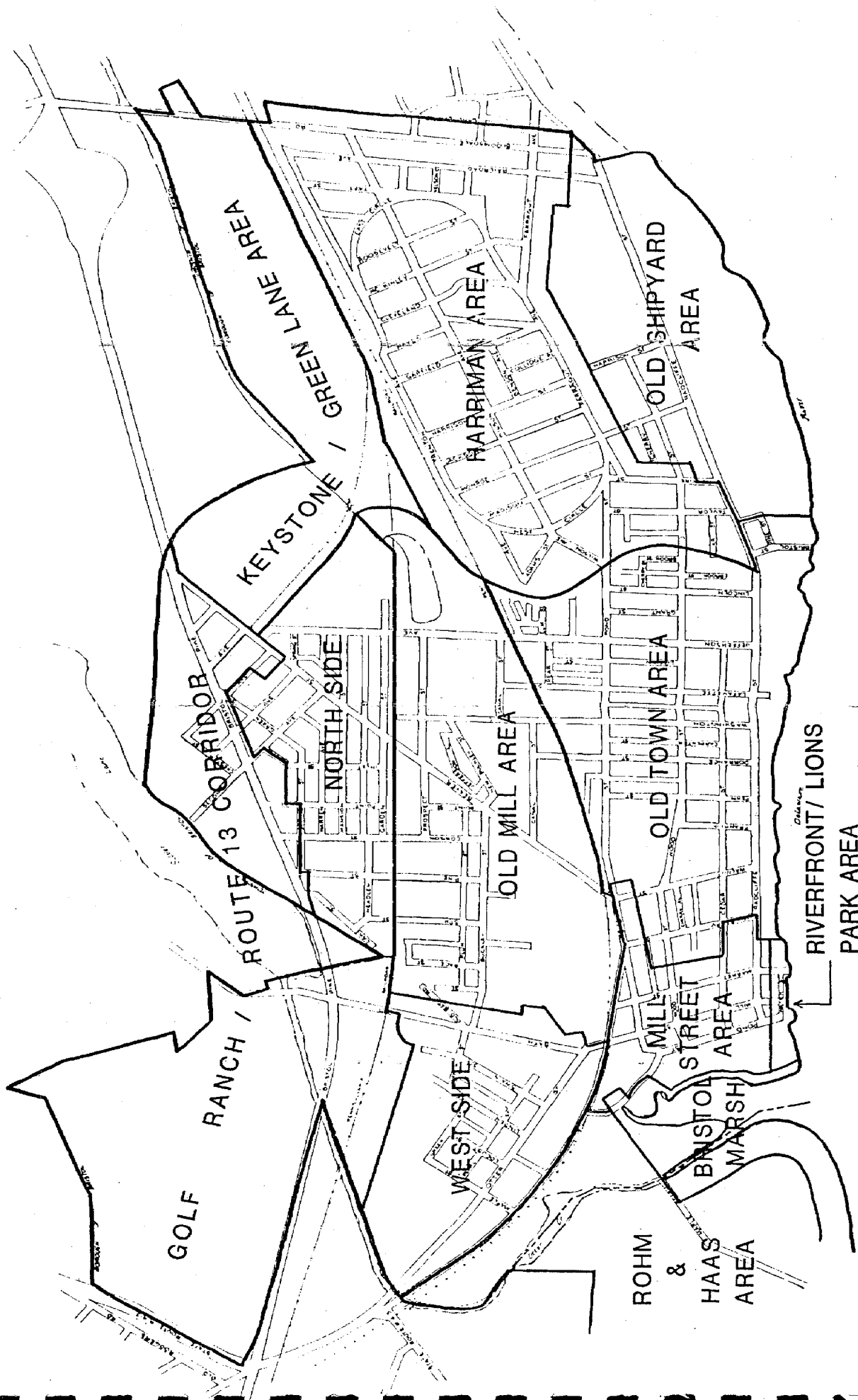


SOURCE OF GRAPHICS: Energy Conscious Development, Fairfax County Virginia Office of Energy.

THE PLANS FOR AREAS OF BRISTOL

The Plan for the Mill Street Area  
The Plan for the Riverfront/  
Lions Park  
The Plan for The Bristol Marsh  
The Plan for Rohm and Haas Area  
The Plan for the West Side  
The Plan for the Old Town Area  
The Plan for the Old Mill Area  
The Plan for the Old Shipyard Area  
The Plan for the Keystone/Green  
Lane Area  
The Plan for the Golf Ranch/  
Route 13 Area  
The Plan for the North Side

# BOROUGH OF BRISTOL PLANNING AREAS



## THE PLAN FOR THE MILL STREET AREA

The Mill Street area is defined as including land from the edge of the Bristol Marsh Nature Preserve to both sides of Market Street, and from Old Route 13 to the edge of the Riverfront and Lions Parks along the riverfront. This includes the Mill Street Parking Lot, Mill Street itself, businesses along Pond Street to Beaver Street and areas of Radcliffe Street between Mill and Mulberry Streets.

The Mill Street area holds tremendous potential for being a truly special place. The best way for Mill Street to become revitalized is to build off of its unique strengths.

- Overall Strategies for Revitalizing Mill Street Should be Based on an Assessment and Ranking of the Major Advantages and Disadvantages of Mill Street in Attracting Businesses and Customers, Compared to Competing Areas.

A full understanding of how Mill Street compares to competing areas will continually be important. Mill Street should not try to compete for types of activity that it has little chance to attract. Instead, the area should build off of its greatest potential strengths.

- Discover and Emphasize the "Market Niches" Where Mill Street Can Best Succeed, Especially Markets Currently Not Being Widely Offered in the Bristol Region.
- Emphasize the Mill Street Area as a Very Special Place to Shop and Visit.
  - Emphasize the soon-to-be restored historic character of the Mill Street Area, especially through restoration of building facades.
  - Complement the historic character of the area with attractive public improvements.
  - Emphasize types of goods and services not widely available in the region to attract shoppers from outside of Bristol.
  - Continue to provide a wide range of goods and services for Borough residents.
- Carry Out Overall Strategies of Revitalization for Mill Street Through a "Main Street Program".

A Main Street Program is a process of businesses and government working together to promote growth of businesses in small downtowns. This program usually involves four key parts:

- Combine Funding From a Municipal Borrowing with Other Financing to Make Available Low Interest Loans for Facade Improvements.

The Borough should consider borrowing funds that provide interest that is exempt from Federal income tax in return for a lower interest rate. These funds would then be used to loan to businesses at interest rates to help them pay for major improvements to the facades of their property. As businesses pay off the loans, the money is returned to pay off the Borough's debt. A reserve fund to cover possible defaults should be established.

- Through Promotional Campaigns, Make People More Aware of the Special Characteristics of the Mill Street Area.
- Once Several Additional Historic Facades on Mill Street Have Been Restored, Market the Area as "Historic Mill Street".
- Use Promotions and Special Events to Get People to See the Positive Things Happening in Bristol and to Add Interest to the Area.
- Use distinctive signs to direct people to the Mill Street Area.

These signs should be integrated into an overall sign program throughout the Borough. This system of signs, combined with the "Gateway" program, will attract attention and direct visitors to major attractions.

- Consider Additional Joint Advertising and Joint Promotions.

Businesses should consider assisting in each other's promotions. For example, if a person would buy a certain item from one business, they would receive a discount at a neighboring business. This type of promotion could be valuable in introducing regular customers of an established business to a new business.

- All Public Improvements That Are Installed Along Mill Street Should Complement the Historic Character of the Area.

Every item or improvement that is placed along Mill Street and adjacent blocks of Wood and Cedar Streets should be a part of a consistent overall theme of historic preservation. This overall historic theme will help to unify the Mill Street area, providing a more distinct identity. This does not mean that every item must be historically accurate or be designed to look like an antique, but that every item should blend into the concept and not conflict with the theme. For example, benches should be made of simple stained wood and metal designs, not plastics or modernistic styles. It is important that improvements along the street not become too eccentric or overdone.

The intent is not to require the replacement of all public improvements in the area, but that as any feature is added or needs to be replaced, that it be selected carefully.

Wherever public improvements already exist that are old and attractive, they should be left in place and restored.

- Develop an Urban Design Program to Recommend Public Improvements to Mill Street, Including Street Lights, Sidewalks, Curb Cuts, Benches and Other Street Furniture.

Many types of public improvements could add additional interest to Mill Street, provide important conveniences for shoppers and make the area more attractive. These are known as "streetscape" improvements.

- The Following Major Types of Improvements Might be Considered:

- Benches - Benches should be carefully located to provide interesting views of activity and also the riverfront, so that they will be used. Benches also might be located near a bus stop. Because the Mill Street sidewalk is not extremely wide, it will also be important to avoid blocking pedestrian flow along the sidewalk and in and out of buildings. In addition, benches should be purposely designed so that they cannot be used for sleeping.
- Bicycle Racks - Bicycle racks should be placed along Mill Street at locations where they will not interfere with pedestrian travel. Major other locations for bike racks would include Lions Park, the Water Department Shed and public parks.

Bike racks are needed to encourage persons to make short bicycle rides from neighborhoods to Mill Street for quick shopping. Also, a large number of children currently ride bicycles in the area. In addition, the system of pathways described under The Plan for Recreation will probably greatly encourage bicycling through Bristol. These bicyclists should be encouraged to stop on Mill Street.

Bicycle racks should be placed in locations that are easily visible from major public streets and businesses to discourage theft.

- Restrooms - Encourage the provision by more businesses of restrooms open to the public. This will be increasingly important as more tourists are attracted to the area. Restrooms can allow shoppers to spend more time on Mill Street. Because of security and maintenance concerns, restrooms should be located at places such as inside a business where people are available to keep an occasional watch over the facility.

- Shade Trees - Shade trees should be considered along Mill Street for shade and attractiveness. It may be decided that sunlight is actually an amenity on the street. In this case, varieties of trees could be chosen that let most light through the tree. Shade trees are discussed further under The Plan for Community Facilities and Services.
- Water Fountain - A water fountain provides a very pleasant background sound to an area and attracts a great deal of attention by people. Any water fountain should be designed to recycle water.
- Removal of Architectural Barriers - Public improvements should be available for handicapped persons. This includes a well-marked rest-room for the disabled. Ramps should eventually be cut into the corner of all curbs, which would also provide access for baby strollers.
- Street Signs - Try to work existing street and traffic signs into the designs of new public improvements, such as street light and traffic signal poles. The intent is to reduce less than attractive intrusions into the sidewalk. Painting all sign posts in the historic areas black might be considered to give them a sort of historic character.
- Street Lights - A wide variety of attractive historic-style street lamps are commercially available, if several ever need to be replaced. One measure to make existing modern street light posts throughout historic areas more compatible with the historic character would be to paint them black.
- Traffic Signal Posts - If any traffic signal posts in the area ever need to be replaced, such as at Old Route 13 and Mill Street, the Borough should investigate replacing the posts with posts that will complement the historic character of the area.
- Business Directory - A map showing the location of major businesses in the area might be considered in an appropriate location. The display should be durable against any vandalism and be designed so that it can be very easily updated.
- Bus Shelters - Consider urging SEPTA to construct a bus shelter at a convenient location along Mill Street. The shelter should have an historic theme while the inside should be clearly visible from outside of the shelter. As an alternative, a merchant might be willing as part of a historic restoration, to provide an area under roof as part of a building's entrance to serve as a shelter from rain and wind for persons waiting for a bus.
- Sidewalks - Brick sidewalks would be an attractive addition to many areas of the Borough, but at very great expense. As sidewalks need to be replaced, new sidewalks might be constructed with a variety of attractive paving patterns. For instance, these sidewalks might combine patterns of red brick with cheaper but more monotonous concrete. The brick patterns could vary between different streets. In any surfaces of sidewalks, particular attention must be paid to avoid surfaces that are slippery when wet, which includes many types of red brick.

- Organization of the Business Community - On Mill Street, this has been accomplished for many years through the Mill Street Business Association.
- Assisting Property Owners in Improving the Outsides of Their Buildings - The emphasis in physical improvements is often on restoring the fronts of older buildings and on developing more attractive business signs.
- Promotion - This involves joint advertising and the sponsoring of special events to bring people to the downtown.
- Economic Enhancement - This means to improve the overall climate of an area for doing business. For example, this might include certain tax breaks or low interest loans.

A Main Street Program usually involves a full-time professional Main Street Manager to organize effort and administer the program. The Main Street Program has been developed by the National Trust for Historic Preservation and has been refined over the years in many very successful programs throughout Pennsylvania and the nation, including Burlington, New Jersey.

- Seek State and Private Funding to Assist in Paying for a Full-Time Main Street Manager.

The Borough of Bristol and the Mill Street Business Association in 1986 were working together to seek funding from the Pennsylvania Department of Community Affairs to pay for a substantial share of a Main Street Program, including part of the salary of a full-time Main Street Manager and a share of funding for facade improvements.

- If State Funding is Not Available, Develop an Alternative Method of Carrying Out a Main Street Program.

A full-time Main Street Manager would be very desirable, but not necessary if adequate funding would not be available. The work might also be accomplished through part-time work, with the Main Street Manager working the remainder of a workweek for the Municipal government on other projects or for another nearby municipality, especially in some other similar program. Two other alternatives would be to use all-volunteer effort or a professional consulting firm.



- Public Telephones - Phone booths might be integrated into the design of other improvements, such as a bus shelter.

- Trash Receptacles - Generally, experience in many towns has shown that most persons will use a trash can and not litter if the trash can is available in a very convenient location. The Mill Street Business Association in 1985 placed trash receptacles on Mill Street. Additional trash cans in the area are probably needed. A trash can should be available on each block of both sides of Mill Street and through-park land along the riverfront. The Borough government should be committed to regular collections. Although the cost of collections from trash cans may be high, it is not nearly as high as collecting material once it becomes litter and spread around.

Trash receptacles should be compatible with the historic theme of the area. Also, receptacles should be designed to prevent the attraction of insects. Area businesses might be willing to purchase a trash receptacle approved by the Borough in return for the placement of an attractive advertisement on the side of the receptacle.

- Tile Mosaics of Major Events, Symbols or Buildings Meaningful to Bristol - An artistic tile design placed within a sidewalk can add great beauty and interest to an area, while highlighting an image important to the community.

- All Public Improvements Should be Durable and Constructed of Vandal-Resistant Materials.

This is discussed under The Plan for Recreation.

- Public Improvements Throughout the Borough Should be of Standard Designs and Components for Easy Replacement and Repair.
- Make Streetscape Improvements to Not Only Mill Street But Also Between the Mill Street Parking Lot and Market Street, to Pond Street, Wood Street, Cedar Street and Clift Street.

The purpose of these improvements would be to tie together better parking and Mill Street. Wood Street and Cedar Street in this area especially should be seen much more as pedestrian pathways than for vehicular traffic.

Landscaping, display windows, store entrances, murals, banners, signs and possibly wider sidewalks would help to make each of these connecting routes more inviting.

- Work to Redevelop Market Street.

As of 1986, several buildings on Market Street behind Mill Street were not in good condition. These include several private homes and private garages. At the same time, several of Bristol's most historic buildings are along Market Street, including the Friends Meeting House and Bristol Fire Company No. 1.

The overall goal on this street should be to attract uses that will complement Mill Street while maintaining the urban fabric of the area. The connections between Mill Street and the Old Town neighborhoods should be strengthened by encouraging active retail and service uses with windows and entrances onto Wood and Cedar Streets between Mill and Market Streets. Also, improvements to encourage pedestrian use might be considered.

Dilapidated buildings on Market Street that are not suitable for rehabilitation as active businesses or homes should be demolished to provide additional parking. Demolition would be most appropriate for private garages and storage buildings, and for adjacent lots that would allow the assembly of a parking lot or building site of worthwhile size. Any parking lots should be carefully designed to be compatible with their surroundings.

Some Mill Street businesses in buildings that have walls on Market Street might consider opening up rear entrances or display windows, directed towards pedestrian traffic from the residential neighborhoods of Old Town.

- Promote the Development of New, Active Commercial Uses Facing the Mill Street Parking Lot.

The rear of Mill Street that faces the Mill Street parking lot could be improved to bring added vitality to the area. The intent is to provide tighter connections between the parking, the nature preserve, the riverfront area and the commercial area.

Stores in existing buildings that have walls facing the parking lot could open a second entrance and/or display windows onto the parking lot. Existing underutilized buildings and underutilized space in the rear of buildings could be converted to provide space for additional uses. Eventually, new construction of commercial buildings facing the parking lot may occur.

An excellent example of the revitalization of the rear of an older commercial street is the Suburban Square Shopping Center in Aardmore. This is located off of Route 30 on the "Main Line" to Philadelphia.

- Consider the Construction of an Attractive Elevated Walkway on the Existing Sidewalk Between the Mill Street Parking Lot and the Area for the New Stores.

This walkway could help attract activity to the rear of Mill Street. It might be elevated several feet above ground level to bring the level of activity above any possible flooding (see later objective).

- Study and Work to Reduce Problems of Flooding of the Mill Street Parking Lot to the Rear of Mill Street.

Flooding problems that exist to the rear of Mill Street must be dealt with before intensive commercial use of this area can be considered. Greater understanding of this problem and possible ways it can be dealt with is needed.

- Traffic Flow Changes Through the Mill Street Parking Lot Could Be Used to Slow Down Through Traffic.

Presently, a significant amount of through traffic uses the Mill Street Parking Lot from Canal's End Road to Clift Street. This is not undesirable when it encourages a bypass of Mill Street, which should be pedestrian-oriented. It may be undesirable when it encourages a bypass of Old Route 13 and onto Radcliffe Street. The most essential factor is that this through traffic be kept to low speeds and not create hazards to pedestrians. Well-marked speed bumps might be installed. Any future improvements to the lot should be concerned with directing this through traffic away from pedestrian crossings, with providing safe pedestrian walkways through the lot and with using areas of landscaping to slow down traffic by forcing cars to make turns.

- Seek Improvements to the Landscaping of the Mill Street Parking Lot.

The Mill Street Parking Lot includes a large number of trees. Some of the trees that have died over the years should be replaced. Types of shrubbery chosen to require low maintenance might be located in appropriate areas, but not to obstruct views by vehicles or pedestrians across the parking lot.

This is discussed further under The Plan for the Riverfront/Lions Park.

- Use an Area Adjacent to the Water Department Shed and the Canal Bed for Remote Parking.

A major advantage of Mill Street is its very large parking lot. However, as the numbers of shoppers, tourists and boaters increase throughout the area, parking may begin to be a concern. Any development of offices could also absorb a great amount of parking. The large open lot along Canal's End Road beside the Water Department Shed would make a viable remote parking lot, to

be developed if the Mill Street lot begins to become filled. The actual canal bed would not be filled in, but adjacent land would be covered with crushed stone and eventually asphalt if used regularly.

This lot would provide parking for some of the visitors to the Bristol Marsh Nature Preserve and the proposed Visitor's Center/Museum in the adjacent Water Department Shed (see The Plan for the Bristol Marsh Nature Preserve). Also, persons launching boats could be required to park their trailers at this lot. Tourist buses could unload their passengers near the Wharf and then park at this lot. At times when the Mill Street lot would be expected to become crowded, such as during the Christmas shopping season and weekends during the Summer, businesses in the area might require their employees to park in the lot near the Water Department Shed.

- Business Persons and Their Employees Should Make an Effort to Park at the Far End of the Mill Street Lot to Make More Spaces That Are Closer to Mill Street Available for High Turnover by Customers.
- Develop the Bristol Theater Into a Regional Arts Center.

This theater on Radcliffe Street is owned by the Grundy Foundation. It could be actively used for plays, films, concerts and community activities. This would bring more people to downtown Bristol, including many who might not otherwise see the area. Also, this theater would add more nighttime activity to Bristol, helping to make the area more safe and more interesting. One possibility would be to redesign the theater to provide a terrace or balcony facing the waterfront.

CONCEPT MAP OF MILL STREET AND RIVERFRONT AREAS

## THE PLAN FOR THE RIVERFRONT/LIONS PARK

This park land is located along the Delaware River between the River and the edge of the Mill Street Parking Lot and Samuel Clift Street. The area is well-used for sitting, strolling and picnicking. Part of it is owned and maintained by the Bristol Lions Club, while the rest is owned by the Borough.

The proposals in this section were developed by the National Park Service and a Citizens Advisory Committee in 1985.

- Enlarge Lions Park.

The Lions Club has proposed expanding the area of their park to encompass the municipally-owned land extending to the edge of the parking lot. An initial design includes a central area for informal play by children. This area would also serve as a site for small events such as musical performances, children's theater and walking tour lectures. This central area would be well-lit, include fixed seating and be well-landscaped. Exhibits could be posted on movable structures that would be set up during special events.

- Close Samuel Clift Street Between Mill Street and Market Street to Vehicular Traffic.

This would open additional land for pedestrian use. The street might be leased for an outdoor cafe by the King George II Inn or be used for special events by the Bristol Arts Theater. Access on the street could still be available for deliveries and emergency vehicles.

- Expand the Municipal Riverfront Park.

Municipal park land exists near the edge of the Otter Creek Marsh adjacent to the Mill Street parking lot. This park should be extended to replace an area currently used for parking near the existing boat ramp. This would provide more land along the river for the enjoyment of people, while preventing vehicles from blocking views of the river. These lands will continue to be used for fishing, picnicking and strolling. This area might also provide a site for a guardhouse to regulate the use of the adjacent boat ramp.

- Construct Bulkheading or Improve the Rip-Rap Along the Riverfront Park From the Boat Ramp to Market Street.

Improved rip-rap or bulkheading with a riverfront walkway was considered to be a high priority by most of the advisory committee members. Although bulkheading is preferred, it is expensive; therefore, it should be pursued only if sufficient public funding is available. As an alternative, improvements to the existing rip-rap should be made to protect the shoreline from further erosion.

It is essential that the shoreline improvements be well-designed for many functions. These include a walkway, a fishing platform and a place to sit and view the river. Visitors should be able to get close to the river without having to climb over rocks. Several steps or levels might be built down to the river. Safety, especially for small children, will be important in design.

The Pennsylvania Fish Commission should continue to be consulted on the design to ensure that it will be appropriate for fishing. For example, rip-rap promotes good fishing by providing a thriving habitat for plants and organisms that fish eat.

- Improve the Rip-Rap Along the Riverfront Park from the Bristol Marsh Nature Preserve to the Boat Ramp.

Rip-rap includes large stones placed along the riverbank. Maintaining this area in rip-rap will help to add variety on the riverfront. To reduce erosion around the rip-rap, and to make the area more attractive and accessible, additional stones should be added to this area.

- A Walkway Should be Constructed Along the Riverfront Park and Lions Parks as Part of a Borough-wide Walkway System.

As discussed under The Plan for Recreation, an entire system of walkways is recommended throughout the Borough, for travel and recreation.

A walkway should connect the nature trail system of the Bristol Marsh Nature Preserve with the Riverfront Park. This walkway should then continue along the bulkheading and lead pedestrian traffic to Mill Street and Radcliffe Street. An historic walkway would then continue along Radcliffe Street.

- A Floating Boat Dock Should be Constructed on the Riverfront.

A floating boat dock would be available during the warmer months and then removed and stored during the winter. This dock would add interesting activity to the riverfront and attract visitors to the area. It also would make it easier for boaters using the boat ramp to load cargo and passengers. This boat dock might be located parallel to the shoreline near the existing boat ramp.

- The Existing Boat Ramp Should be Improved.

The boat ramp from the Mill Street parking lot in 1986 was not in good condition. The Borough Council should formally apply to the Pennsylvania Fish Commission for improvements to the ramp.

The Borough should consider charging a fee for the launching of boats from the ramp. This could pay for maintenance and increased security in the area.

- A Guardhouse Should be Considered Beside the Boat Ramp.

A guardhouse could be built to collect fees for the use of the boat ramp. It could also serve as a small information center. Also, the guard (or auxiliary policeman) could maintain a watch over the area of the park to report any illegal activities to the police.

- Stress the Entire Mill Street and Riverfront Area as a Center for the Community.

This area should not just be viewed as a retail center and a park, but as a focus for many types of community activities and events. The goal is to establish the area with a strong identity in the minds of area residents.

A number of special events already attract people to the area, including the Lion's Club Summer concert series and the many events of Historic Bristol Day. Additional events of all types should be encouraged, such as ethnic festivals, political speeches and ceremonies. Street entertainers might be attracted during times of greatest use. A kiosk might list events occurring throughout the community. Concerts might be added to the lunchtimes, possibly through cooperation with local theater groups and the Pennsylvania Council on the Arts. Art shows, crafts displays, performances and recitals should be encouraged. For example, antique shows could complement the historic atmosphere. Different types of contests for posters, logos, T-shirts and buttons could be judged at the riverfront. Special events will be particularly important as Bristol continues to progress, to get people to see all the positive things that have occurred. One way special events that will be highlighted will be Bristol's Tricentennial Celebration in 1997.

The overall intent of these special events is to make Mill Street and the riverfront park a really special and fun experience, that will be much more interesting than going to a shopping mall, where nothing is displayed unless it is for sale.

- Cooperate With Burlington, New Jersey in Joint Tourist Promotion and Special Events.

The histories of Burlington and Bristol have been intertwined for over two and a half centuries. When the attractions of each place are combined, Bristol-Burlington could be seen as a major tourist destination.

- Support Burlington's Efforts to Develop Burlington Island for Recreational Uses.

This forested island for decades was a major amusement complex.



- Some Type of Small Ship Might Regularly be Anchored as a Riverfront Attraction.

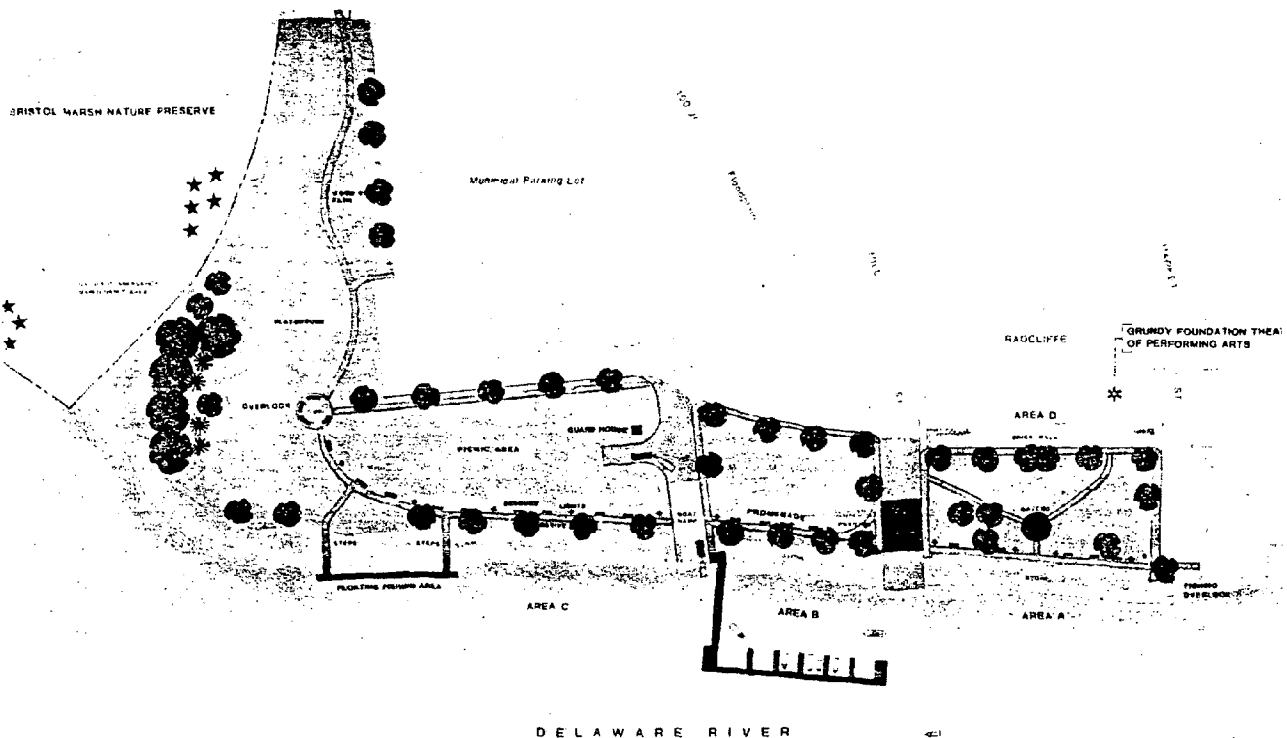
This might include a floating restaurant, a sightseeing ship or a floating museum. It could make regular trips to Burlington, Burlington Island and Philadelphia.

- Improvements for Fishing Should be Made Near the Mouth of Otter Creek.

Because the Bristol Marsh Nature Preserve provides excellent feeding grounds to attract fish, a good opportunity for encouraging fishing is present.

Initially, a fishing access point might be developed in this area along the Riverfront Park. Eventually, a fishing pier might be extended into the mouth of the creek. This pier should be designed to provide easy access to senior citizens and handicapped persons who might have difficulty reaching the existing rocky shoreline.

#### WATERFRONT PARK DESIGN



## THE PLAN FOR THE BRISTOL MARSH AREA

This area is defined as wetlands adjacent to the Mill Street parking lot that are fed by the Otter Creek. This includes wetlands along Canal's End Road and Maple Beach Road.

- Support the Preservation of All Wetlands in This Area as Part of a Bristol Marsh Nature Preserve.

A national nonprofit organization, the Nature Conservancy, is working to develop the Bristol Marsh Nature Preserve in wetlands adjacent to the Mill Street Parking Lot. As discussed in The Overall Plan for Land Uses, wetlands serve many important functions in the ecosystem. The Preserve will not only protect these areas, but also stress environmental education programs.

The Nature Conservancy proposes that the Preserve be developed in phases as funding allows. Most of the land would remain in the ownership of the Borough but be managed by the Conservancy.

A nature trail is proposed to start at the Mill Street Parking Lot near the electric substation. This trail would lead to two wooden boardwalks that will float on the marsh and include observation decks.

- Encourage All Adjacent Wetlands to be Donated or Leased to the Nature Conservancy.

Bristol Borough and the Grundy Foundation are providing land for the Nature Preserve. Rohm and Haas Corporation is presently considering donating some adjacent land it owns to the Nature Conservancy.

- The Water Department Shed Should be Developed Into a Headquarters Building for the Nature Preserve and/or a Museum, With Parking Beside the Canal Bed.

This is discussed under The Plan for Historic Preservation and Tourism.



## THE PLAN FOR THE ROHN AND HAAS AREA

This area includes lands adjacent to Maple Beach Road that are not wetlands. This also includes land owned by Rohm and Haas on the south side of Old Route 13 and adjacent to Otter Creek. This area also includes the Borough Sewage Treatment Plant and Borough water storage tanks.

- Encourage Appropriate Industrial Expansion in Areas Not Within the 100-Year Floodway.

This area largely includes vacant land adjacent to the Rohm and Haas Corporation's Bristol Plant. Parts of this land are used for employee parking along Old Route 13 and truck parking off of Maple Beach Road. Bristol Borough's modern sewage treatment plant is also in this area. Expansion of Rohm and Haas' operations would be an appropriate use of this area.

## THE PLAN FOR THE WEST SIDE

This area includes land between the elevated railroad tracks and Old Route 13 and areas between Clymer Street and the Borough line at Otter Creek. This includes buildings along Bath Road and Otter Street and along the north side of Old Route 13. This also includes the Howell Street Industrial Park, alongside of the elevated railroad tracks.

- Target Housing Rehabilitation Projects to Where They Will Have the Most Positive Effects on the Surrounding Neighborhood.

This is discussed under The Plan for Housing.

- Promote Improved Maintenance of Industrial Uses on Otter Street and Old Route 13.

Improvements of this area will not only help to attract additional desirable development to the area, but also help raise the property values of nearby homes.

- Promote the Continued Improvement of the Area of the Intersection of Bath and Otter Streets and Along Old Route 13.

Much could be done to improve the appearance of buildings and land in these areas. This includes exterior renovation of buildings, screening of storage areas by landscaping and improved maintenance of yards. Over the long-run, certain of these properties might be bought, combined and replaced with modern commercial buildings.

- Encourage the Development of a Light Industrial Use on the Large Open Tract at Otter and Maple Streets That Will Not Adversely Affect the Adjoining Residential Areas.

A greenhouse formerly covered this large site.

- Promote Housing Rehabilitation Along Bath Street, a Major Entrance to Mill Street.

As part of the "Gateway" program, the Borough is working to improve the appearance of major entrances to the Borough. Also, homes, commercial and industrial buildings on highly visible streets should be improved in appearance. As persons notice the improvements, they will be more likely to consider investing in the community. This will help encourage a general revitalization of neighborhoods.

- Consider Developing a Small Totlot Park Within the West Side Neighborhoods.

This is discussed under The Plan for Recreation.

- Consider Alternative Ways of Providing Adequate Road Access to Homes and Buildings Between Otter Street and Old Route 13.

This is discussed under The Plan for Transportation.

- Promote Improvements to the Intersection of Bath and Otter Streets.

This is discussed under The Plan for Transportation.

- Require a Higher Level of Maintenance of Storm Water Drainage Areas Behind the Howell Street Industrial Park.

Storm water concerns in general are discussed under The Plan for Community Facilities and Services. A channel was constructed to carry storm water from this area to Otter Creek. It is currently overgrown and poorly maintained, preventing storm water from flowing out of the area.

## THE PLAN FOR THE OLD TOWN AREA

The Old Town Area is defined as areas between the rail spur and the Delaware River, and between Market Street and the former location of Adams Hollow Creek. This includes Historic Radcliffe Street.

- Emphasize Historic Preservation to Attract and Encourage Rehabilitation of Housing.

This is discussed under The Plan for Historic Preservation.

- Place Special Emphasis on the Historic Preservation of Radcliffe Street

Radcliffe Street includes a rich variety of architectural styles. It is already protected by an Historic Zoning District. Any proposed alterations, demolitions and construction of a building on Radcliffe Street will receive especially careful review by the Historic Architectural Review Board and Borough Council.

- Acquire the Rail Spur Right-of-Way.

The Borough plans to acquire the rail spur right-of-way from Cleveland Street in Harriman, all along the north side of Pond Street, beside Leedom Carpet Mills and on to Canal's End Road. This will make this land available for parking, recreation, a pedestrian pathway and development.

- Develop Neighborhood Parking Lots on Appropriate Land Along the Rail Spur Right-of-Way.

The density of most neighborhoods in this area suggest that more off-street parking be provided. Parking areas should be reasonably convenient to many different parts of Old Town. These parking areas are discussed under The Plan for Transportation.

- Seek an Appropriate Location for a Carefully Designed Totlot Park.
- Develop a Pedestrian Pathway in the Rail Spur Right-of-Way.
- Consider Leasing Small Pieces of Public Land Along the Delaware River to Responsible Neighborhood Groups to Allow Proper Management and Oversight of These Areas.

The three objectives listed above are discussed under The Plan for Recreation.

- Promote an Historic Walkway and Self-Guided Walking Tour Along Radcliffe Street.

This is discussed under The Plan for Economic Development and Tourism and The Plan for Recreation.



## THE PLAN FOR THE OLD MILL AREA

This area is defined as extending from the elevated railroad line to the rail spur and from the Delaware Canal towards the north side of Bath Road. This includes Grundy Towers, the Leedom Carpet Mills (Mayco), the Grundy Mills, the Buckley Street neighborhood, the train station, the Grundy Ice Rink and the Grundy Tennis Courts.

- Strongly Encourage the Conversion of Vacant, Historic Industrial Buildings Between the Rail Spur and the Canal Into Housing With Limited Business and Office Uses.

The historic restoration of the exterior of old industrial buildings will add greatly to the beauty of Bristol. The interiors of these buildings should be converted into apartments or condominiums.

Limited business and office uses will be appropriate in this area. These types of uses might include medical offices, business offices, certain personal services, financial institutions, restaurants and small retail uses. Commercial uses should be limited to a low percentage of the total gross floor area. Retail and office uses are appropriate only on the first floor.

- Specifically Encourage the Conversion of the Leedom Carpet Mills Into Housing With Limited Business and Office Uses.

The Leedom Carpet Mills includes a complex of attached 19th Century industrial buildings along Beaver Street beside the rail spur right-of-way. The Grundy Foundation purchased the complex to ensure that it would be properly maintained until a high quality use could be attracted. As of 1986, several major developers have expressed serious interest in the building.

The most promising proposal as of 1986 was to develop the building into luxury apartments with offices.

- Encourage the Conversion of Historic Mill Buildings Currently Occupied by Industries Into Housing as Industrial Uses Become No Longer Economically Feasible or Desirable.

Certain of the old mill buildings between the Canal and the rail spur are occupied by important employers. This includes the Grundy Mills building on Jefferson Avenue, Fidelity Fibers on Canal Street and the Barker and Williamson building on Canal Street. This Plan seeks to encourage these employers to continue in business in Bristol. However, should these industries desire to expand or relocate, the Borough should encourage developers to investigate the buildings for acquisition and conversion to housing.

Efforts might be made to encourage these employers to relocate to more appropriate areas for industry. Two specific areas would be the Green Lane Industrial Area and the Bristol Commerce Park (Golf Ranch).

- Encourage the Historic Restoration of Old Mills, the Grundy Mills Clock Tower and Other Buildings Through Historic Districts and Related Tax Benefits.

This is discussed under The Plan for Historic Preservation. The Grundy Mills Clock Tower is a community symbol for Bristol that is especially worthy of restoration. Once restored, it might be clearly lit at night to serve as an even stronger symbol of Bristol's character.

- Seek to Restore the Delaware Canal Between Washington and Beaver Streets.

This is discussed under The Plan for Recreation. This might help resolve problems with storm water flooding in the new Buckley/Beaver Street Area.

- Warren Snyder Elementary School Should be Used as a Community Center for the Area, Through Greater Weekend and Evening Use.

This is discussed under The Plan for Community Facilities and Services.

- Target Housing Rehabilitation Efforts to Where They Will Result in the Most Benefits in Revitalizing Neighborhoods.

This is discussed under The Plan for Housing.

- Encourage An Appropriate Use of the Old Bristol Train Station, Such as a Restaurant.

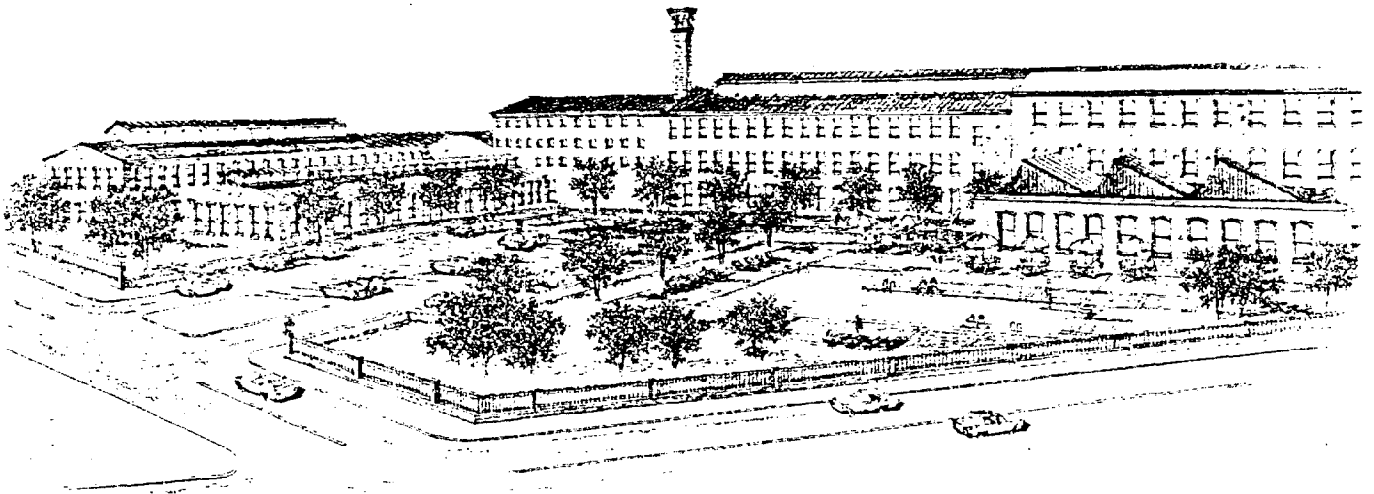
The railroad station in Bristol and all the area around it is presently owned by AMTRAK, the National Passenger Railroad Corporation. AMTRAK leases to SEPTA the old vacant railroad station, the modern shelters and platforms currently in use, and one-half of the 148 space parking lot. SEPTA is seeking a use to take a long-term lease of the old railroad station. The station is an architecturally significant structure that needs a substantial amount of rehabilitation. The Bristol Exchange Club is considering leasing the station and rehabilitating it. The Club would then sublease part of it as a restaurant and use the remainder for their offices.

The most appropriate use of the old train station would result in the creation of jobs, the raising of tax revenue for the Borough and the School District, the rehabilitation of the building and the maintenance of the adjacent grounds. A use should be attracted that will generate activity in the area by responsible persons, especially at night. Also, the use should complement the use of the train service. The proposal by the Exchange Club meets most of these objectives and in 1985 received the support of Borough Council.

- Office or Commercial Development on a Portion of Train Station Parking Lot May be Appropriate, If an Adequate Amount of Parking Remains for Train Station Parking, Including Space for a Reasonable Increase in Ridership.

A large section of the train station parking lot is currently unused. Parking should be set aside not only for existing train ridership, but also for riders who might be attracted in the future as train service continues to improve and the service is better marketed. Commuter train service to Bristol is discussed under The Plan for Transportation.

CARPET MILLS DRAWING



## THE PLAN FOR THE HARRIMAN AREA

For the purposes of this Plan, the Harriman Area is being defined including the old community of Harriman, the Farragut Avenue Business Area, land along the rail spur and residential areas along Taylor and Fillmore Streets.

- Generally Promote Continued Stability of Healthy Residential Areas.

Most of this northeast side of Bristol is stable. Active community organizations, discussed under The Overall Plan for Land Uses are one possible way to work for continued stability.

- Work to Develop Affordable Ways to Reduce Storm Water Flooding Problems

Storm water concerns in general are described under The Plan for Community Facilities and Services. Certain storm water flooding problems are present in eastern Harriman. The problem is mainly present when heavy rains occur at the same time as high tide. A complete storm sewer system to take the water from the East Side of Harriman to the Delaware River would be extremely expensive. Creative ways of reducing this flooding should be considered.

- Acquire the Rail Spur Right-of-Way.

This is discussed under The Overall Plan for Land Uses. The Borough plans to acquire the rail spur right-of-way from Cleveland Street to Jefferson Street and then on to Canal's End Road.

- Develop Athletic Facilities for the High School in the Rail Spur Right-of-Way.

Additional recreational facilities are needed by the High School, including various athletic and practice fields. This would include land from Harrison Street to Cleveland Street.

Fencing that is very difficult to climb is definitely needed along the entire length of the main railroad tracks, especially in areas along Trenton Avenue where the tracks are not very elevated.

- Close Trenton Avenue Between Harrison and Garfield Streets to Allow Safe Access by Students Between the High School and the New Athletic Fields.

This would avoid a hazard to students crossing Trenton Avenue from cars which too often are exceeding the speed limit in this area. Acceptable alternative routes are available.

- New Housing Should be Developed in the Rail Spur Right-of-Way Between Harrison and Adams Streets, With a New Public Street.

Homes should be built in this area that are a type that will probably be owner-occupied. The homes should be built on the best portions of this tract while adding unbuildable wet soils to the adjacent park land. A new road must be constructed from Trenton Avenue as part of this housing development.

- Develop a Walkway System Along the Edge of Trenton Avenue from Green Lane Road, Behind the High School and to the Delaware Canal.

This is described under The Plan for Recreation. This pathway would make use of the rail spur right-of-way.

- Strongly Promote the Former Delaware Valley Hospital Center for Appropriate Uses, Such as a Personal Care Center for Senior Citizens.

This Plan strongly encourages use of this building which will be compatible with the adjacent residential neighborhood. This is a very large and mostly modern complex of buildings at the corner of Wilson Avenue and Pond Street. In 1986, developers were very seriously interested in converting the building into a personal care center for senior citizens. This type of facility usually houses older persons with health problems that cause them to need some assistance. Common facilities for dining and recreation are usually provided.

- Construct a New Public Road to Extend Adams Street to Jefferson Avenue for Improved Access to the Delaware Valley Medical Center Complex.

Land already is vacant and owned by the Borough for this road and proposed adjacent neighborhood parking. This new road will help reduce congestion on Pond Street in Harriman by providing more direct access between the Delaware Valley Hospital complex and Jefferson Street.

- Promote the Improvement of the Farragut Avenue Business Area and the Growth of Businesses.

Business persons along Farragut Avenue should establish an active business association to promote the growth of businesses in the area. One way of encouraging growth is to increase the identity of the area. An urban design study might be made of the area to analyze parking needs and to develop a program to improve the appearance of buildings, parking areas, signs, sidewalks and street lighting.

- Establish a National Register Historic District That Covers the Original Area of Harriman, to Recognize Its Significance as a Planned Model Community, to Encourage Housing Rehabilitation and to Preserve the Attractiveness of Buildings.

This is discussed under The Plan for Historic Preservation.

- Target Housing Rehabilitation Efforts to Where They Will Have the Most Positive Effects on a Neighborhood.

This is discussed under The Plan for Housing. Most of the housing in this area is well-maintained. Two blocks worthy of particular concern are a block between McKinley, Cleveland, Trenton and Wilson Streets and a block between Wilson, Hayes and Garfield Streets.

## THE PLAN FOR THE OLD SHIPYARD AREA

This Area includes industrial land between the Farragut Avenue business area and the Delaware River and between Fillmore Street and Green Lane Road. This includes the Purex Corporation, the General Door Manufacturing Corporation and Farruggio's Trucking Company. During World War I, this area was developed as a shipyard. The area was converted into a warplane factory during World War II.

- Encourage a Revitalization of the Purex Industrial Complex, to Provide Increased Employment and Tax Revenue.

Purex Incorporated operates a large manufacturing and warehousing facility between the Delaware River and Radcliffe Streets.

Purex currently leases the north and south ends of this site. Purex then subleases the northernmost end of the site to a trucking company. The center portion of the tract is owned by Superior Zinc Corporation. Purex is considering taking over this center tract of land to allow the integration of their operations and the construction of new manufacturing and warehousing facilities. A revitalization of the Purex Industrial Complex should include the demolition of dilapidated structures, the rehabilitation of industrial buildings that are feasible for continued use.

- The Borough Should Work With Purex to Assist Them in Seeking All Available Government Assistance and Incentives for Expansion.

Any revitalization of the Purex complex would require a significant amount of capital. A variety of low-interest loans and other assistance should be sought to make an expansion economically feasible.

- Consider Including the Purex Complex in the Proposed Harriman Historic District, But With Adequate Flexibility to Allow the Demolition of Buildings That Are too Dilapidated for Rehabilitation.

The Purex industrial area includes many old industrial buildings remaining from the World War I shipyard. Many of the buildings in this complex are in dilapidated condition making historic restoration and adaptive reuse completely infeasible. The varying conditions of different buildings were documented in the 1982 study, "Zinc Works Industrial Redevelopment Plan" that was completed for Bristol Borough under the Pennsylvania Coastal Zone Management Program.

- Encourage Purex to Reserve a Strip of Land for Public or Semi-Public Recreation Along the Delaware River.

This is discussed under The Plan for Recreation.

- Any Future Proposals for Carefully Designed and Planned Housing and Limited Commercial Uses Along the Riverfront in This Area May be Worthy of Consideration.

This Plan encourages the use of all lands along the northeast corner of Bristol to be used for expanded industrial activities, with the shoreline itself reserved for a riverfront walkway. The existing real estate market in the region and discussions with representatives of Purex Incorporated has shown that industry, as the most realistic use of this tract, as of 1986.

However, if industrial expansion in the area becomes no longer feasible or realistic, proposals for residential uses may be worthy of consideration. The adjoining riverfront land to the north in Bristol Township is presently developed for residential use. New residential development in this area might involve luxury townhouses with a retail and service center and a riverfront park. It would be essential that any such use be properly buffered by distance and landscaping from any adjacent industrial use. This buffering would be important to avoid nuisances to the residential uses and to allow a reasonable amount of expansion by the industry.

- Encourage the Continued Expansion and Attraction of Industries in the Monroe and Harrison Street Areas, South of Farragut Avenue.

Undeveloped and underdeveloped land remains available in this area in the interior portions of large lots.

- Encourage Major Heavy Trucking Operations in the Area to Relocate to More Appropriate Locations Within the Borough, Especially the Green Lane Industrial Area.

The movement of heavy trucking operations to the Green Lane Industrial Area would bring these operations closer to the Turnpike interchange. Also, this relocation would assist in directing heavy truck traffic off of Historic Radcliffe Street, discussed under The Plan for Transportation. Other concerns, such as noise, air pollution and wear of minor streets, would also be reduced.



## THE PLAN FOR THE KEYSTONE/GREEN LANE INDUSTRIAL AREA

This area is defined as land around the Keystone Lighting Company on Beaver Street and industrial land between the Delaware Canal, the elevated railroad tracks and Green Lane Road. In addition, adjacent land owned by Bristol Borough School District along Route 13 in Bristol Township is included in this area for the purposes of discussion.

- Actively Market Industrial Land Owned by the Bristol Borough School District, Stressing its Proximity to an Interchange of the Turnpike and its Visibility from Route 13.

For over two decades, the School District has owned a large tract of land stretching along Route 13 from Beaver Street almost up to the Turnpike ramp. This land continues on both sides of the Delaware Canal up to the elevated railroad tracks and behind Keystone Lighting Company. More active efforts are needed to market this land. The School District should consider working with the Borough government to promote this land as part of a larger area of development potential for industrial use. This area could be marketed as the Green Lane Industrial Park.

- Develop Industrial Land Between the Canal and the Elevated Railroad Tracks Into the Green Lane Industrial Park. The separate landholdings in this area could be integrated into the Green Lane Industrial Park with the development of a common road and other improvements.

The following types of improvements shall be considered in this area:

- Reconstruct the existing road through the industrial area - The surface of the existing road is in poor condition and would be a significant disincentive to any industry considering a location in the area.
- Extend the existing access road through the tract to make lots ready for development - This road should be extended from its current location to make available a few additional building sites. Once these sites begin to be developed, the road should be extended to provide access to the rest of the tract.
- Reconstruct the existing entrance to the industrial area or develop a new entrance - The existing entrance involves an awkward turn from Green Lane Road. The entrance to the industrial area should clearly be suitable for access by tractor-trailers. The slope of Green Lane Road in this area will be a concern.
- One large attractive sign should be placed at the entrance to the Green Lane Industrial Area on Green Lane Road - As of 1986, a diverse collection of signs, some outdated, existed at the entrance. The new sign proposed to replace these signs should include easily changeable places for individual uses to add their names and logos.

- Adams Hollow Creek on the northeast side of Keystone Lighting Company requires channelization improvements - Adams Hollow Creek may need to be channelized in this area to make development possible on adjacent lands.

- Work to have rail access extended throughout the tract as needed - A rail spur already cuts through the center of the tract from the elevated railroad lines. It may be advisable to seek to have this rail service extended to additional lots.

- Seek to Have Industrial Development on Both Sides of the Canal Fully Integrated, Through Close Cooperation With Bristol Township.

An attractively designed industrial area on both sides of the Delaware Canal would be a benefit to Bristol Borough, the Bristol Borough School District and Bristol Township.

- Consider Alternative Ways of Providing Access to the Land from Route 13 With Close Cooperation With Bristol Township.

Land areas on either side of the Delaware Canal would benefit from a road system that was joined. To do this, it would be necessary to construct a bridge over the Delaware Canal. The feasibility of this proposal depends upon the impact on the Canal, a National Historic Landmark and the cost. If this were possible, both areas would have access from Route 13 and Green Lane Road.

- Consider Establishing an Industrial Development Corporation and Authority to Prepare the Land for Development.

This authority might sell bonds that would be guaranteed by the Borough and/or the School District to build the roads, extend sewer and water lines, grade the sites and legally subdivide the land into lots. The bonds would be crafted to be paid off by revenue from the sale of lots. Applications should be made for all sources of Federal and State funding for these types of projects.

To hold down initial development costs, the areas easiest to prepare for development would be improved first. Later, as a greater cash flow is available, additional areas would be prepared.

- Promote the Relocation to the Green Lane Industrial Area of Existing Industrial Uses in Bristol That Have Adverse Effects on Their Existing Neighborhoods.

This is discussed under The Overall Plan for Land Uses.

- Work to Clean Up the Delaware Canal and Improve the Towpath.

This is discussed under The Plan for Recreation. The Canal from behind Keystone Lighting Company to beyond Green Lane Road is part of the Theodore Roosevelt State Park. The industrial development proposed in this area should be sensitive to this historic site.

- Any Buildings and Parking Lots Constructed Along the Delaware Canal Should be Setback From the Edge of the Canal and Should be Screened by Evergreen Landscaping.
- All Buildings of the Green Lane Industrial Area Should be Separated From the Towpath by Strong Fencing.

The Canal towpath in this area is used by many children. Strong fencing is needed to keep them from playing in the industrial area.

- The Theodore Roosevelt State Park Staff Should be Notified of Any Development Proposals Adjacent to the Canal and Given an Opportunity to Comment.

## THE PLAN FOR THE GOLF RANCH/ROUTE 13 CORRIDOR

### GOLF RANCH

- Continue to Promote the Development of the Golf Ranch Tract for Well-Planned Commercial, Office and Light Industrial Uses.

The Golf Ranch Tract is an example of the successes that can occur when the Borough undertakes leadership in economic development.

Under the guidance of a citizen task force, the Borough successfully marketed this 98-acre site. In 1985, a major developer entered into an agreement of sale to purchase the tract from the Borough and to construct the Bristol Commerce Park. As of 1986, a 250,000 square foot shopping center is to be constructed on the portion of the tract nearest Route 13. Development of a complex of light industrial buildings and offices in a campus-like development is proposed for the rear portions of the tract. Medical offices and other appropriate facilities related to the adjacent Lower Bucks Hospital are recommended for the northern corner of the tract.

- Require the Developer of the Golf Ranch to Make Needed Road Improvements.

This is discussed under The Plan for Transportation.

- The Major Entrances to Bristol Along Route 13 Should be Improved and Better Marked.

This is discussed under The Overall Plan for Land Use.

- Storm Water is a Concern in the Golf Ranch Tract Area.

Many areas around the Golf Ranch were developed in Bristol Township without proper attention to storm water management. This has resulted in problems throughout the area. The Bristol Commerce Park is currently planning a very large basin to detain storm water to avoid flooding on the site and to avoid increased flooding along Otter Creek.

### ROUTE 13

- Pedestrian Access Across Route 13 in the Area of Second Avenue Should be Improved, Especially to Reduce Hazards to School Children.

The objective listed above is discussed under The Plan for Transportation.

- Homes on Second Avenue on the North Side of Route 13 Will Probably Continue to Remain as Occupied.

The 1971 Master Plan for Silver Lake County Park proposed that almost all land on the north side of Route 13 between Bath Road and Beaver Street become part of the park. This expansion is no longer likely. These homes will probably continue to remain occupied and somewhat isolated from the remainder of the Borough.

- The Mobile Home Park on the North Side of Route 13.

The Borough should carefully inspect this property and require compliance with all Borough codes and ordinances. Any threats to the health and safety of residents of the complex or to the public health in general should be required to be eliminated within a set length of time.

This Comprehensive Plan recommends that the best use of this parcel would be as part of Silver Lake County Park.

- Promote Improved Traffic Flow Along Route 13, Especially Between Bath Road and Beaver Street.

As of 1986, PennDOT planned to put into effect a series of small improvements to Route 13 as it passes through Bristol. These improvements are designed to help traffic move more smoothly. Mainly, this project stresses improved timing and coordination of traffic signals.

Route 13 between Bath Road and Beaver Street has a large number of local streets and commercial driveways opening onto it. These many points of access conflict with the high-speed and high-volume traffic on the highway.

There are no simple solutions to overall traffic problems along Route 13. As a very long-term goal, efforts should be made to reduce the number of driveways and roads entering onto Route 13. Traffic going into and out of Bristol should be directed to intersections on Route 13 that are already controlled by traffic signals.

The number of places where vehicles can make left-turns should be greatly reduced to prevent high-speed rear end collisions. Left-turns should be specifically prohibited from Pine Street onto Route 13. Signs should be posted at all cuts in the median stating that U-turns are prohibited.

One long-term goal is to reduce the number of cuts in the median barrier. The existing low median barrier might also be replaced with a three-foot concrete median barrier that would steer wayward cars back into their own lane, thereby avoiding deadly head-on collisions.

- Access to and From Businesses Should be More Carefully Controlled.

Lack of curbs along parts of Route 13 allows traffic to flow in confused patterns. Traffic needs to be more carefully directed to well-marked entrances and exits which are separated.

- Require Any New Commercial Development to be Well-Planned.

A grass buffer should exist between the edge of the highway and each parking lot. Wherever reasonable, parking should be located to the rear or side of a commercial building, with landscaping between the building and the road.

- Promote a General Clean-up of the Route 13 Corridor, a Highly Visible Part of Bristol.

The businesses along Route 13 should realize that a more attractive area will be in their best interests. It will attract new investment to the area, making it a more popular place to shop. Also, prospective customers may feel more comfortable stopping at a business that looks attractive and inviting.

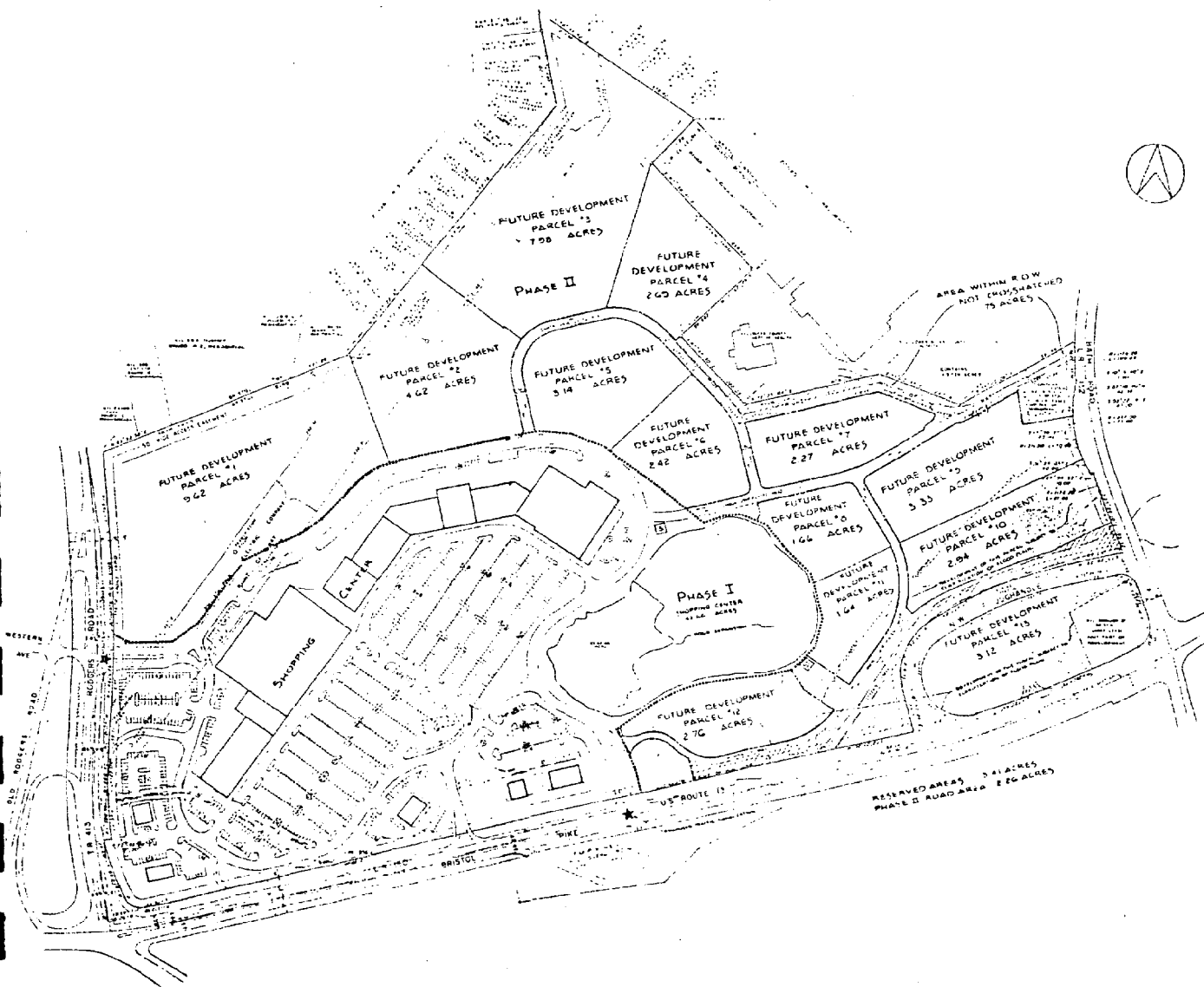
Area business persons should work together to identify aspects of the corridor that can be improved and to encourage each other to take action. Major improvements in appearance could occur by painting buildings, cleaning up storage and display areas, replacing unattractive signs and planting landscaping.

- Uses Along Route 13 Should be Controlled to Prevent Conflicts with Adjacent Residential Areas.

Many of the businesses along Route 13 are immediately adjacent to homes. A complete set of performance standards should be used to restrict nuisances to adjacent properties. These include regulations on noise, fumes, smells, accessory building and outside storage areas.

- Work With Businesses Along Route 13 to Improve the Appearance of Signs.

From an automobile, signs can be the most visible feature of a street. The businesses along Route 13 should work together to encourage the replacement of outdated and unattractive signs with more modern and attractive signs. Many small signs might be combined into one attractive display. Borough regulations on signs should be strictly enforced.



PUTTING THE PLAN INTO ACTION



## THE PLAN FOR THE NORTH SIDE

This is defined as the area between the elevated railroad tracks and the businesses on Route 13. This includes neighborhoods along Beaver Street and Mansion Street and the Grundy baseball fields.

- Seek Continued Stability of This Residential Area.

The North Side includes many attractive and stable blocks of homes. The programs discussed under The Plan for Housing and The Immediate Action Program will help to ensure continued stability.

- Enforcement of Borough Codes Will Ensure Adequate Building Maintenance.

Efforts should be made to make sure that any lack of maintenance of individual buildings, especially apartment buildings, is not allowed to cause negative effects on surrounding properties. Codes should also be carefully enforced to protect residents of buildings from hazards.

- Improve Access Between the Grundy Ballfields and the Delaware Canal Towpath.

A sign should be placed in the park parking lot informing people that land along the Delaware Canal can be reached from the ballfields.

- Reasonable Efforts Should be Made to Avoid Nuisances to Adjoining Homes From the Grundy Ballfields.

This might include seeking to more carefully direct overhead lights to reduce the amount that they shine on adjacent homes. Additional parking might be provided within the park. Additional police assistance might be helpful to assist in traffic control and crowd control at certain times.

- Seek to Reduce Negative Effects of Route 13 on Adjacent Neighborhoods.

This is discussed under The Plan for the Golf Ranch/Route 13 Corridor. Generally, efforts should be made to make Route 13 more attractive through a program of improvements to commercial properties.

## PUTTING THE PLAN INTO ACTION

GOAL: TO MAKE BEST USE OF THE ENERGY, ENTHUSIASM AND PARTICIPATION OF THE CITIZENS AND ORGANIZATIONS OF BRISTOL

- Keep Citizens and Organizations Well-Informed of Projects and Programs Underway and Ways They Can Participate.
- Encourage the Establishment of Neighborhood Organizations and Block Clubs to Build Neighborhood Spirit and to Help People Improve Their Own Neighborhoods.
- Provide Citizens and Interested Groups with Opportunities for Early and Continuous Involvement.
- Provide the Information Necessary for Citizens and Groups to Effectively Participate.
- Because Many of the Recommendations of This Plan Will Need Volunteer Effort to be Put Into Action, a Volunteer Clearinghouse Should be Established.

A system is needed to match the volunteer work that needs to be done with the skills, interests and times of availability of individuals interested in volunteering.

- Work Through the School System to Develop Greater Community Identity and Pride, and Understanding of Bristol's Rich History.
- Seek the Full Support and Effort of Bristol's Many Active Civic, Fraternal and Ethnic Organizations and Other Local Groups.
- Seek Increased Media Coverage of the Many Positive Trends and Events in Bristol.
- Prepare and Publish Newsletters Informing the Citizens of Pertinent Issues, Changes and Decisions in Bristol's Revitalization and Preservation. A Simple One-Page Newsletter Could be Prepared by Volunteers and Mailed Out with Water Bills.
- Prepare and Publish a Summary Version of This Comprehensive Plan for Wide-Spread Distribution.
- Continue to Establish Citizen Committees to Consider Particular Concerns in Carrying Out This Comprehensive Plan.
- Develop Effective "Partnerships" with Private and Nonprofit Entities Which Are or Can be Instrumental in Implementing the Comprehensive Plan, Such as Organized Church Groups, Builders, Developers, Realtors and Financial Institutions.

- Establish a "Gifts to Bristol" Program.

Many communities have had great success with publishing a list of community improvements that are needed. Persons or corporations wishing to make a tax-deductible contribution could read the list of items in a pamphlet that would also include the estimated cost. The items listed should be very interesting and highly visible. For example, the list might include a street tree, a park bench, a bullet-proof vest for the police, a decorative sign, a street banner, a complete restoration of the Municipal Building Clock Tower and a flagpole. The items listed should cover a great range in costs. The intent is to provide funding for many amenities that the Borough would not otherwise be able to fund.

Certain items on the Gifts to Bristol list might make it possible for a community facility to be named after a person. For example, a person donating money towards a small park might wish that it be named in memorial to his father.

GOAL: TO MAKE BEST USE OF THE HUMAN ENERGY, SUPPORT AND FUNDING OF ALL AVAILABLE RESOURCES FROM OUTSIDE OF BRISTOL

- Make Best Use of All Available Programs, At All Levels of Government, To Carry Out Needed Projects.

As of 1986, one especially attractive but very competitive program was Urban Development Action Grants (UDAGs). Under this program, the Federal Government offers low-interest loans to developers of major projects. The loans are then paid back to the Borough instead of the Federal Government. UDAG projects would provide a substantial increase in the amounts of funds Bristol would have available for community development projects.

- Keep Well-Informed of All Available Government Programs and Help Developers Become Increasingly Knowledgeable of Their Availability.
- Make Best Use of Technical Assistance and Advice Available From Government Agencies on the Federal, State and County Level.
- Make Best Use of Advice and Support From Interested Nonprofit Organizations.

These organizations would keep national and regional groups involved in historic preservation, conservation or fishing.

- Make Best Use of Support From Private Foundations and Corporations.
- Seek Even Greater Assistance From Area Financial Institutions, To Encourage an Atmosphere of Community-Wide Fiscal Responsibility.

INTENT: CARRY OUT THIS COMPREHENSIVE PLAN THROUGH A PROGRAM OF CONTINUOUS PLANNING AND ACTION

Detailed planning, financial planning and budgeting, communications and cooperation, and the development of imaginative new ways of solving long-standing problems are necessary to implement this Comprehensive Plan for the Borough of Bristol. Planning must not end with the adoption of this Plan.

- Consider Revisions to the Comprehensive Plan Every Five Years.

A completely revised Comprehensive Plan should be developed every ten to twelve years, or as major conditions change.

- The Borough Planning Commission Has a Role to Continually Look Ahead and Identify Concerns on the Horizon.
- Annually Review the Borough's Zoning Ordinance for Possible Improvements.

The Zoning Ordinance and the Subdivision and Land Development Ordinance will be comprehensively updated in 1986 to carry out the goals, objectives and recommendation of this Comprehensive Plan.

- Update the Borough's Building Codes and Other Ordinances as Needed.
- Continually Review the Borough's Community Development Program to Ensure its Coordination with This Comprehensive Plan.
- Discover and Apply New Sources of Local Revenue Which Can be Channeled Into Community Development Projects on a Continuing Basis Rather Than on a Project-by-Project Basis.
- Use the Expenditure of Public Funds as a Catalyst to Private Investment in Community Improvement.
- Continue to Perform Specific Studies Needed to Properly Carry Out the Recommendations of this Plan and to Allow the Proper Design of Specific Projects and Programs.

Examples of these studies might include:

- Studies of the feasibility of restoring certain major historic buildings to attract developers.

- Market studies to attract developers to major development opportunities in the Borough.
- An urban design study to recommend and design specific public improvements to be made in the Mill Street area over the long-run.
- A detailed design for improvements along the municipal riverfront park and Lions Park.
- Designs for reuse of the spur track right-of-way.
- Consider Instituting a Process to Continually Plan for Needed Capital Improvements, to Ensure a Stable Tax Rate and to Prepare for Future Borrowing.

Periodically, Bristol will need to fund major "capital improvement" projects. Capital improvements are very expensive projects to fund or replace major public facilities or utilities. These are extraordinary expenses that occur at one time, as opposed to operating expenses that occur every year. Examples of capital improvements could be replacement of sewer lines, drilling of new wells, development of a new park, complete reconstruction of several streets or installation of a new storm sewer system.

The concern is that major projects could result in a tax increase for one or two years. If these projects were programmed ahead of time, the Borough could annually set aside funds to pay for them. Sinking funds could also help to avoid the need to borrow the money for the projects, thereby saving the Borough very large amounts of interest.

To carefully prepare for major future expenses and to help decide when they should be accomplished, many communities have found great value in a formal Capital Improvements Program (CIP). A CIP is a process of systematically and rationally identifying, prioritizing, planning and budgeting very large expenditures.

Under a CIP process, a program of capital improvements would be laid out for the next five years. The process would stress exactly which years each project would be funded, along with the expected cost and the source of that money. Every year, the CIP would be updated for the next five years.

- Consider Expected Revenues and Expenditures for the Next Five Years.
- Identify all Projects Being Considered and Their Expected Costs.
- Carefully Review and Prioritize Projects.
- Schedule Projects by Budget Year.
- Implement Projects Scheduled for That Year.

A CIP process can allow many benefits, including:

- Borough officials can develop a better appreciation of the Borough's financial situation beyond the current year's budget.
- Borough expenditures and borrowing can be coordinated with projects planned by the School District.
- Borough expenditures for projects can be more easily timed to be used as the local contribution for Federal and State grant programs that provide matching funds.
- Private sources of funding can better plan their budgets, reserving funds for future projects.
- It would be easier to time needed borrowing for when interest rates are expected to be at their lowest.
- A longer lead time would be available for each project, allowing more time for careful review and design.
- A longer lead time would allow more opportunity to consider and seek all alternative means of private and government financing.
- The benefits of many proposed projects could be more easily compared against each other, allowing projects to be prioritized.

EXISTING CONDITIONS AND TRENDS

# BRISTOL BOROUGH SUMMARY

## POPULATION

### POPULATION CHANGE

	<u>POPULATION</u>	<u>CHANGE</u>
1970	12,085	- 22%
1980	10,867	- 10.1%

### PERSONS PER HOUSEHOLD

	<u>PERSONS/HOUSEHOLD</u>
1970	3.10
1980	2.69

### AGE/SEX

	<u>MEDIAN AGE</u>	
	<u>MALE</u>	<u>FEMALE</u>
1970	28.3%	33.1%
1980	29.8%	33.8%

	<u>AGE GROUPS</u>				
	<u>&lt;15</u>	<u>15 - 24</u>	<u>25 - 44</u>	<u>45 - 64</u>	<u>65+</u>
1970	3,196	2,083	2,507	2,939	1,360
1980	2,227(-)	1,942(-)	2,615(+)	2,505(-)	1,578(+)

### RACE

	<u>1970</u>	<u>1980</u>
White	88.8%	86%
Black	6.5%	6%
Spanish	4.7%	8%

### INCOME

MEDIAN FAMILY INCOME:	1979	\$18,331
PERSONS BELOW POVERTY LEVEL:	1979	13.4%



## HOUSING

### TOTAL DWELLING UNITS

#### DWELLING UNITS

1950	3,413
1960	3,591
1970	4,015
1980	4,300

### AGE OF HOUSING: 1980

HOUSING BUILT 1939 OR EARLIER 67.3%

### HOUSING TYPE: 1980

SINGLE FAMILY	71%
MULTI-FAMILY	
2-9 UNITS	21.8%
10+ UNITS	6.7%
MOBILE HOMES	.4%

### HOUSING TENURE: 1980

RENTER-OCCUPIED	60.6%
OWNER-OCCUPIED	39.4%

### HOUSING VACANCY: 1980

HOUSING VACANCY 6.2%

### HOUSING COST: 1980

MEDIAN VALUE/OWNER-OCCUPIED DWELLING	\$32,200
MEDIAN MONTHLY RENT	\$187/month

### HOUSING CONDITIONS: 1980 + 1985

DWELLINGS IN POOR CONDITION BY EXTERIOR VISUAL APPEARANCE	196/4.5%
DWELLINGS LACKING PLUMBING FACILITIES	82/1.9%
OVERCROWDED DWELLING	142/3.5%

## ECONOMIC CHARACTERISTICS

### MANUFACTURING

	<u>ESTABLISHMENTS</u>	<u>EMPLOYEES</u>	<u>PAYROLL</u>	<u>VALUE ADDED</u>
1977	41	2,300	\$29.2 Million	\$108.2 Million
1982	30	2,600	42.2 Million	130.8 Million

### RETAIL TRADE

	<u>ESTABLISHMENTS</u>	<u>EMPLOYEES</u>	<u>SALES</u>
1977	152	658	\$42,739,000
1982	102	690	72,800,000

### WHOLESALE TRADE

	<u>ESTABLISHMENTS</u>	<u>EMPLOYEES</u>	<u>SALES</u>
1977	29	275	\$45,365,000
1982	25	345	47,935,000

### SERVICE INDUSTRY

	<u>ESTABLISHMENTS</u>	<u>EMPLOYEES</u>	<u>RECEIPTS</u>
1977	54	681	\$13.7 Million
1982	72	475	20.2 Million

